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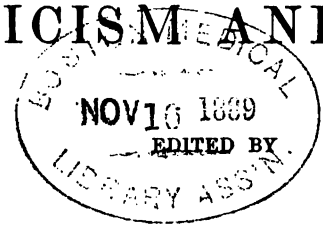

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RUPTURED TUBAL FŒTATION—A CASE SUCCESSFULLY TREATED BY ABDOMINAL SECTION—WITH REMARKS.*

BY WILLIAM GARDNER, M.D.,

Professor of Gynæcology in McGill University; Gynæcologist to the Montreal General Hospital; one of the Vice-Presidents of the British Gynæcological Society.

The remarkable advances of obstetric medicine in the last decade have been evidenced as much perhaps, if not more, in everything connected with the subject of extra-uterine gestation than in any other direction. The transactions of every important meeting of obstetricians and gynæcologists is enriched by one or more papers on the subject, generally with reports of cases; followed usually by a vigorous discussion which shows usually some divergence of opinion by able men as to the best course to pursue in the treatment.

The last annual meeting of the American Gynæcological Association, held in September, 1887, and the February (1888) meetings of the British Gynæcological Society as well as the Section on Obstetrics of the American Medical Association at its meeting last month, each discussed the subject. Dr. Herman, of London, has recently published in the *Lancet* for May 26th and June 2nd, 1888, an exceedingly able and thoughtful paper on the early treatment of extra-uterine pregnancy.

The fearfully tragic nature of the illness and too frequently of the death of women so affected when left to nature, and the brilliant success of the modern surgical treatment of this condition amply account for such wide-spread interest. Under these circumstances I venture to believe that the recital of a recent case in my own experience may be of some interest and value as a contribution to the literature of the subject. The, to me, unexpected presence of my friend, Dr. Johnstone, of Danville, Kentucky, who has recently written very ably on the subject, will, I am sure, enrich the discussion of my paper.

Mrs.——, æt. 29, was married in July, 1887, and had a miscarriage at between two and three months the following October. In this she was attended by my friend, Dr. Arthur Browne, of Montreal, and she recovered easily enough. Her first following menstrual period was on the 2nd December, and was normal. She remained well during the rest of the month except that she presented some of the signs of pregnancy, slightly marked. Early in January a slight bloody discharge appeared and lasted two weeks; it was not like her ordinary menstruation. About the middle of January she was seized with intense pelvic pain and a most alarming condition of collapse, lasting for two days. During a good part of this time Dr. Browne feared she would die. She, however, slowly rallied and partially recovered, when, a fortnight later, during the first days of February, there were alarming recurrences of the pain and other symptoms. Under these circumstances Dr. Browne came to ask me to see the case with him, and told me that he believed he had a case of extra-uterine fœtation.

I found the woman suffering very severely from pelvic and abdominal pain, imperfectly controlled by full doses of morphia. There was marked distension and frequent vomiting, and the pulse was rapid and very weak. On vaginal examination, there was a tolerably free bloody vaginal discharge. The uterus was markedly softened, bulky, and fixed, and to the right of, and behind it, there lay a painful and firm mass of some kind or other.

The results of the history given are by Dr. Browne, and my examination of the patient was fully concurrent in the diagnosis of ruptured tubal fœtation previously made by him and Dr. George Ross, who had also be consulted. This being our diagnosis, what was to be done? We discussed the propriety of using electricity, or of performing abdominal section. Electricity, we considered, to be precluded by the evident hæmorrhage and peritonitis. At our second visit the patient was decidedly worse, and in great danger, and then we decided to open the abdomen. This was ac-

*Read before the 8th Annual Meeting of the Ontario Medical Association at Toronto, June 1888.

cordingly done on the 8th February. On opening the cavity a quantity of blood clot, of varying age, and bloody serum was revealed. On the right of the uterus, in the region of the ovary and tube, lay a ragged, granular mass. On attempting to raise this to apply a ligature to it, it was torn away. I made no further attempt to tie the torn base, but proceeded to scoop out what I could of blood clot, of which there lay a large quantity in the Douglas pouch. The cavity was then well washed out with a large quantity of warm water. In this part of the operation, the signal advantage of Lawson Tait's large ovariotomy trocar became very apparent. This tube measures about $\frac{7}{8}$ of an inch in diameter, and at its free end is a blunt beak, with two lateral openings. The large rubber tube attached to it was immersed in a pitcher of warm water held aloft by assistants. The water was then sucked through till it flowed from the trocar tube, which was then carried to all the deep parts of the pelvis, the powerful stream bringing away masses of clot and fibrine, an operation which could in no other way have been so effectually managed. The blunt beak of the instrument precludes all possibility of any injury to intestines or other structure. A glass drainage tube was carried to the bottom of the pelvis, where it was retained for a week. It will be observed that I applied no ligature to anything, yet the torn vessels yielded no more than a moderate amount of blood and bloody serum, as shown by the fluid sucked from the tube. The wound was closed as usual and the patient put to bed in rather an alarming condition, her pulse was 140° and small. Nothing was given by mouth for three days. She was fed per rectum with beef-tea and brandy. Under soap-suds and turpentine enemata, flatus was passed within sixteen hours, and a fæcal motion obtained in twenty hours. The distension was thus rapidly reduced and the pain soon relieved. Not a particle of morphia or opium was given at this stage. She made a tedious but complete recovery. The tedious nature of the convalescence was entirely due to a severe attack of cystitis.

At the time of operation no semblance of a fœtus was seen, but on careful examination afterwards of the mass removed, a blood stained fœtus about an inch in length, as well as characterstic chorionic villi were discovered by Dr. Johnston, the Pathologist to the Montreal General Hospital. From the appearance of the fœtus and parts when removed, I have no doubt that the vitality of the fœtus ceased at the time of the first serious symptoms, but that it did not escape. Such a condition of course shows that electricity would have been useless at any time after this patient was first seen by her physician.

The diagnosis of extra-uterine pregnancy is on all hands confessedly difficult, and yet it is probably not so difficult as imagined by the inexperienced. The first thing to be sure of is the possibility of pregnancy. If then the patient present the signs of abortion—pelvic pain and vaginal discharge—the pelvic pain being usually severe and attended with faintness or collapse, and the discharge containing fragments of, or a complete decidual cast of the endometrium; and if on examination we discover the characteristic softness, enlargement of the uterus and the violet discoloration of the genitals, but above all the rapidly growing tumour on one side and behind the uterus, the diagnosis is established with such a measure of certainty that we must act. The next question is, what shall we do? This part of the subject—the treatment—is by no means settled to the satisfaction of all parties, and some of the most recent discussions have indicated a wide difference of opinion on the part of high authorities as to what shall be done, or perhaps more correctly, what shall first be done. The treatment of extra-uterine fœtation may be spoken of under three heads: fœticide by electricity, abdominal section to remove the fœtation, and expectancy.

Electricity.—The form of electricity which has the greatest number of adherents is the faradic current; it is the simplest and most easily applied, and there must be very few medical men who do not possess the necessary apparatus. Certain eminent abdominal surgeons strongly oppose it, and yet there is a mass of evidence in its favor which seems to me to make its position unassailable. I grant that the evidence in some of the cases will not bear close scrutiny, but this is not the case as regards the bulk of it. I have published a case in which I take it the evidence as certainly proved the condition as anything short of seeing the fœtus or chorionic villi.

Abdominal Section.—Mr. Tait, Dr. Johnstone,

Dr. Imlach and some others say that as soon as we have diagnosed the condition the operation is indicated, and in this they are supported by the fact, as they claim it to be, that we rarely see such cases until there are evidences of rupture. What are these evidences of rupture? The pain and collapse. The advocates of electricity say the pain and collapse in its mildest form is not due to rupture, but to contractions of the dilated tube. On the other hand it is asserted, and with perfect justice, as there are many sad cases on record, that the first symptoms demanding medical aid may be those of fatal rupture, and as Dr. Herman, of London, says in a very thoughtful and temperate paper which has just appeared in the London *Lancet*, if we judged of the fatality of extra-uterine fœtation, by the results of abdominal section cases and of post mortems, we should regard it as one of the most fatal conditions we know of. But this is misleading. Some very high authorities regard extra-uterine fœtation as far more common than is generally supposed, that rupture often takes place with hæmorrhage into the peritoneal cavity, and that the bleeding ceases spontaneously. The fœtus may escape and be absorbed or may die and be retained in its sac and be dissolved in the liquor amnii and absorbed. A remarkable instance of the possibility of the absorption of the fœtus is the case of Dr. Petch, in which a fœtus so advanced that the heart sounds could be heard, died and was almost completely absorbed. Experiments on animals (rabbits) by Leopold have demonstrated such a fact beyond doubt. Hence the explanation why as in many cases, no fœtus has been found either at autopsy or on section during life. And all such cases cannot be accounted for by the operator having over-looked the remains of the fœtus; a thing easily understood by anyone who has done the operation and removed the clots, etc., by a process of scooping and washing out. These facts with reference to the solubility and capacity of the fœtus for being readily absorbed lend support to the opinions of certain authorities, notably Veit, Leopold and Lesonej, to the effect that most, if not all, pelvic, especially retro-uterine hæmatoceles, are the result of ruptured extra-uterine fœtation (tubal). If this be true then extra-uterine fœtation is by no means so fatal as it has been hitherto supposed, and the practice of opening the abdomen to remove a tubal gestation sac directly we have diagnosed it, is to needlessly expose many women to the dangers of a serious operation. I speak of it as a serious operation. It is not so in the hands of experienced abdominal surgeons, as Mr. Lawson Tait; but such men cannot always be had to operate in an emergency. In competent hands this is one of the most brilliant of the life-saving operations of surgery. But if all the cases on record were available for statistics the showing would by no means be so good. Notwithstanding what I have just said, I desire to appear on record as holding that in all cases in which the diagnosis having been made with reasonable certainty, there are serious symptoms of loss of blood, or of the peritonitis which may be set up, if the patient survive the hæmorrhage, and also in all cases of urgent pelvic or abdominal symptoms of doubtful character, this grand life-saving operation must be promptly done, and it will be done with the assurance that there is no state of the patient, however low, in which it may not be successful. That abdominal section may be necessary, after electricity has killed the fœtus, must I think be admitted. Serious symptoms have arisen at a variable interval after all activity about the gestation sac has subsided. I know of no case in which this has already been done, but my own case is an illustration of the fact. I quote from the report of that case (*Canada Medical and Surgical Journal*, August, 1885):

"After this she improved so much that I ventured to consent to her leaving her bed and going to a couch in the same room, but this proved unfortunate, for she immediately began to suffer from what we took to be symptoms of inflammation and suppuration of the tumor. It became very painful, tender and swollen, and presently a red blush with slight œdema of the surface appeared. Temperature rose three or four degrees, and altogether her condition gave us much anxiety for a week or two. These symptoms occurred on the closing days of March and first week of April. During this period, while I was absent in New York, she was seen by my friend and colleague, Dr. Shepherd. The question of incision and drainage of the supposed abscess cavity was seriously considered, but unexpectedly she began to improve in every respect, and a few weeks afterwards was able to leave her bed.

On the 15th June I had an opportunity of visiting and examining the patient. I found her out of bed, dressed and able to go down stairs. She was pale and thin, but expressed herself as having a fair appetite and good digestion. She had menstruated twice since the beginning of April; profusely on both occasions. Slight pain of hypogastrium still complained of, increased by exertion. Bladder still irritable. On examination, the tumor in the right iliac region is still present, but greatly reduced in size. Per vaginam, the mass to the right of the uterus is to be felt, but also reduced in size. The uterus is decidedly firmer and smaller, measuring three and one half inches."

The more advanced the period of gestation at which electricity is employed the greater must be the danger of such symptoms, as here described, arising.

Expectancy.—Are we ever to let the patient alone, except for the medical treatment of certain symptoms? If Veit and others be correct in their opinion that all cases of retro-uterine hæmatocele depend on ruptured extra-uterine gestation sacs, then I think that sometimes the patient must, or more correctly, may be left to Nature while we closely watch her. But then, I take it, there are cases that have not been diagnosed, but in which only the suspicion of ectopic gestation has arisen, so that practically the treatment of a case of extra-uterine gestation is narrowed to the employment of electricity to kill the fœtus, or of ex-section of the sac, after abdominal section. And it must also be clearly kept in mind by the medical man in charge of such a case, that while using electricity or having successfully employed it, it is his bounden duty to hold himself in readiness to immediately perform abdominal section if this should become necessary.

CORONERS INQUESTS.*

BY JAMES RICHARDSON, M.D., TORONTO.

The question, how, when and where the subject of a coroner's inquest came to his death is, very frequently, one involving very momentous issues, and requiring often for its solution consummate skill, profound knowledge and patient investigation. Whether or not the methods and machinery provided hitherto for its solution are adequate, and whether the time has not arrived when we should have some more perfect method are the questions which I desire to present to the Association for its consideration. It is not my intention to occupy much of your valuable time, nor to attempt to treat these questions exhaustively, but merely suggestively, hoping to elicit the opinions of those who have had opportunities of forming more definite opinions than I have had, and it may be of securing the appointment of a committee of the Association which may, during the coming year, if it deem the case to warrant it, elaborate some feasable plan for rendering investigation in suspected cases of death more in accordance with the spirit and conditions of an advanced civilization. It is hard for me to comprehend how the crude method characteristic of coroners inquests could have furthered the ends of justice in the past. It may be that the conditions of society have hitherto not admitted anything more definite and elaborate, but it seems to me that in the present advanced status of forensic medicine, and in present conditions, coroners inquests have outlived whatever usefulness they may have possessed.

1st. As to the coroner. Of this officer I will say but little. After many years of experience I believe that these gentlemen are generally of good professional attainments and unblemished integrity; that they are well qualified to discharge the important duties of their office. It is a question with me, however, whether they are not sometimes required to be skilled, not merely in medical questions, but also in those which are legal. I speak with much reserve, and in the presence of those who have had this aspect of the subject pressed practically upon them. My own opinion is that the coroner's functions should be confined to throwing all the light upon the cause of death which their professional knowledge afforded, leaving any question purely legal to those who occupy themselves with law.

2ndly. As to the medical witness I will be more emphatic. The usual practice in conducting an inquest is to intrust the post mortem examination, and the medical opinion to any medical man who happens to have been associated during life with the deceased, or to have been accidently connected with the case at or about the time of death—and to expect him to form an opinion as to the cause

*Read before the Ontario Med. Association, June, 1888.

of death without ample opportunity of consulting authorities—of refreshing his memory, or of deciding intricate problems. Now bearing in mind the fact that at any time a case may arise requiring most profound knowledge, and involving issues of immense importance, I leave it to the individual opinion of each one present, whether he is competent to decide such momentous questions on the spur of the moment. Even cases which superficially seem to be simple and uncomplicated, may on reflection become serious and difficult, and there may arise a failure of justice by forming a hasty opinion.

It must be borne in mind that subsequent correction of an erroneous opinion is almost impracticable. No opportunity for so doing may arise. If the matter should be made one of subsequent investigation it is of course possible that the medical witness may have a chance to correct himself, and should undoubtedly do so if mindful of his obligations; but consider what a fearful blow he would strike at his own reputation, how sadly he would be made to figure in court, and how much the ends of justice would be defeated. Surely when the reputation of the deceased and the feelings of surviving friends, or the liberty or even life of the accused, or grave financial issues, or the reputation of the medical witness hang in the balance, it is not too much to ask that ample time should in all cases be afforded the medical witness, for careful consideration of all the conditions and circumstances of the case, and for reference to authorities. There may possibly be some gifted individual, who really is possessed of such absolute and profound knowledge of all anatomical, medical, surgical, therapeutical, pharmaceutical, pathological, toxicological or other ogical branches embraced in medical jurisprudence, that he could unerringly avail himself of at a moment's notice, and it is more likely that there may be some one so vain as to believe himself so gifted, but assuredly he is not to be found amongst the ranks of ordinary medical men.

In what I have said in so far as to the medical witness, I think I may reasonably rely on your concurrence.

I would, however, go much further. It is my matured conviction that it is not possible for any ordinary medical man, no matter how perfect may have been his medical education, to retain such an accurate knowledge of the vast subject of medical jurisprudence, as will make him a reliable witness in any and every case requiring investigation. I hold that within the limits of the time allotted to medical studies all that an ordinary medical man can do is to fit himself for the ordinary duties which will devolve upon him in the discharge of his harrassing practice. To spend the time necessary to perfect himself as a medical jurist would be wasting his energies—the knowledge so acquired could only be called into requisition at long intervals. The remuneration he would receive throughout a long practice could not be adequate to the time and labor expended, and the knowledge would inevitably evaporate through years of ordinary practice. Moreover, skill as a medical jurist can only be acquired by experience. Mere book knowledge cannot compare with practical knowledge. The judgment needs to be perfected by application. For these reasons it seems to me unreasonable to expect, however well grounded by study, any medical man whose constant attention is occupied by the ordinary duties of his profession, that he can retain such an accurate acquaintance with each and every subject embraced in the limits of forensic medicine, as to be ready to form an opinion on any case of disputed or doubtful cause of death which would not be liable to be called in question.

Hitherto, in a scattered population the only available opinion has necessarily been drawn from the ranks of ordinary practitioners, but it is a question with me whether or not circumstances have so altered as to justify the requirement of more specially skilled witnesses, or at least of developing such, which may be available when required by progress of civilization. In all large, thickly populated centres there is a need of a division of labor to ensure perfect efficiency. In the medical world we need some who will devote themselves specially to different branches of medical and surgical practice.

Thoroughness can only be attained by such a division. We have long ago entrusted chemical examination in forensic matters to experts in chemistry. Why should we not have experts in medical jurisprudence as well. I should as soon trust ordinary medical practitioners to conduct chemical examinations in toxicological cases, as I would in other branches of forensic medicine.

So long as circumstances did not permit atten-

tion to be limited to particular branches of medical science, we had to rely upon the material we possessed, but assuredly, perfection in any of them can only be attained by directing our energies and study to some one or other of them.

As to the coroners jury, I hardly feel enough respect for it to give it serious attention. To suppose that a dozen men gathered up promiscuously from the streets, ignorant, as we know them by experience to be, and utterly unable to form a rational opinion as to the cause of death, could in any way advance the ends of justice, is to my mind egregiously absurd. The coroner's jury is always, if not a hindrance, at least a nullity, more frequently the former. In my opinion we might well dispense with the coroner's jury—if not indeed with all other juries.

You will naturally ask, What substitute do you propose, or what change do you think advisable to render coroner's inquests more satisfactory. I honestly confess that I have no matured scheme to lay before you. The matter requires consultation and prolonged investigation. Briefly, however, I may indicate the leading modifications which seem to me desirable.

1. Abolish the antiquated absurdity of coroner's jury.

2. Divest the coroner of all legal or judicial functions. Confine his duties entirely to the investigation of the case as a medical man.

3. In any case of difficulty, let him have the aid of one or more associated coroners.

4. Require more exactness in recording all the circumstances and conditions attendant on the death of deceased.

5. Entrust the post mortem examination to those specially qualified to conduct them, or at least to those who have had frequent opportunities of conducting them, and not to one chosen at haphazard, or because of his accidental association with the case.

6. Give the medical expert ample opportunity to mature his opinion, by comparison, reading and reflection.

7. And finally, require the coroner or associated coroners to present to a proper legal officer a reasoned opinion as to the cause of death, based upon a consideration of all the facts elicited in the course of the enquiry.

ANTISEPTIC TREATMENT OF WOUNDS OF THE HAND.*

BY DR. OLMSTEAD, HAMILTON, ONT.

Mr. President and Gentlemen,—

The subject to which I have the honor of asking your attention, viz.: The aseptic and antiseptic treatment of injuries of the hand, is one which, at first glance, appears to be of rather trivial character, but I think you will all agree that it is one of very great practical importance both to the general practitioner and public at large. We all meet with such injuries almost daily in our practice, while but few are called on to remove renal calculi, cystic ovaries, or brain tumors; and though we have not the opportunity of transplanting a cornea, yet it is not uncommon for us to have fingers almost entirely removed by machinery, which it is in our power to replace and save.

Prof. Agnew says, "The importance of the hand as a prehensile, tactile and defensive mechanism is so great, that in no other part of the body does there exist so much necessity for conservative surgery." Now the frequency with which fractures of the phalanges are treated by amputation is shown by Hamilton's figures, viz., 12 in 30, *i.e.*, 40 per cent., but I feel confident from my observation of hospital cases during the past eighteen months that a great many more can be saved than usually are. However, when it is found absolutely necessary to amputate, as much of the finger should be saved as possible, and we should always aim to get as useful a hand for our patient as circumstances will allow. Now it is as important to practice aseptic or antiseptic surgery in this class of injuries as it is in the major operations, and you all are aware of the necessity there. Here also should we perfect ourselves in the technique of ascepticism, for, as is well said by Gerster, of New York, "It is wicked to attempt to learn the first lessons of asceptic surgery in laparotomy, when, possibly, the surgeon's experience is bought with the life of his trusting patient." Of course we necessarily have to modify our means of ascepticism in emergencies, but never should we deviate from this principle.

* Read before the Ontario Med. Association, June, 1888.

The following is an outline of the method used in my cases:

1. The hand and forearm of patient is thoroughly washed with (i) soap and water and a brush, (ii) alcohol or ether, and (iii) with corrosive sublimate solution, strength of 1 part in 1000.

2. Towels wet with 1.2000 sublimate solution are placed under the hand and around forearm.

3. Instruments are soaked for fifteen minutes previous to use, in a 5 per cent. solution of carbolic acid.

4. Ligatures and sutures are soaked in 1.1000 bichloride solution, containing 25 per cent. of alcohol. These are of catgut, and are kept in the oil of juniper berry; sizes Nos. 0 and 1.

5. If a finger is to be amputated, cocaine ʒ ss. of 4 per cent. solution is injected, and the circulation arrested by a rubber band which has previously been sterilized by a sublimate solution. During the operation the wound is frequently cleansed with 1.2000.

The dressings consist of (*a*) protective, (*b*) iodoform, (*c*) moist bichloride gauze, (*d*) bichloride cotton, splint and bandage.

If the wound is simply a clean incised one it is sealed with a solution of iodoform in collodion (ʒi to the ℥i). The moist dressing is used on account of its being more reliable as an antiseptic dressing, and its power of readily absorbing discharges. In making a solution of corrosive sublimate some tartaric or citric acid is added. The following combination is recommended by Johnston & Johnston, of New York: Hg. Cl_2 gr. 7.5; tartaric ac. 37.5; boiled H_20 Oi. = 1.1000. The following cases on which I practised conservative surgery, illustrate the wonderful power nature has of restoring injured tissues.

Case I.—M.J., a French girl of 17, working in an umbrella factory, presented herself with a lacerated wound of the index finger; about ¼ of an inch of the end of the finger was almost entirely separated, only perhaps $\frac{1}{16}$ of the attachments being left. The natural indication seemed to be to remove the almost detached portion, make suitable flaps and proceed as usual in such cases. However the unusual perfect symmetry of the patient's hand with its taper fingers suggested the thought that nature, who had given such a shapely extremity, might lend herself to its repair without a curtailment of its symmetry. We made the demand of the kindly dame (by thoroughly cleansing the parts in the usual manner, checking all hæmorrhage, and bringing the several edges neatly into apposition and dressing as usual), and the result has been most satisfactory, showing her protest against the insatiate monster's machinery and heroic surgery.

Case II.—W. R, age 8, injury. A compound fracture of the second phalanx and crush of third phalanx of the middle finger. The third phalanx of ring finger was also partially removed. The fracture was an oblique one into the joint and the superficial tissues were very much torn and impregnated with small particles of dirt. The wound extended around about two-thirds off the finger, the flexor and extensor tendons however, were fortunately preserved intact. The mother of the boy informed me that two different physicians had seen the hand and had said that the finger would have to be amputated. From the general appearance this seemed to be what was indicated, but on further consideration I decided to call on nature to save the finger. The parts were carefully cleansed, every visible particle of dirt removed, ragged edges trimmed and dressed in the usual manner; the forearm and hand being suspended in a sling. In putting on the splint it is important to let it extend beyond the digital extremities as children, and even men, are very apt to get their fingers knocked unless they have some such protection. The hand was dressed on the third day and about every other day for the first two weeks, care being taken to always play on the finger a small stream of 1.2000 sublim. solution. The dressings were removed much oftener than necessary perhaps, but I was very anxious to watch the result, which indeed was excellent, he having at the end of a month a good finger with movable joint.

Case III.—J. B., age 35, injury. The third and part of the second phalanx of the middle and ring fingers had been removed by a sharp cutting instrument. Treatment: the sharp edges of the bones were trimmed off and the ends allowed to heal by granulation. After ten days the skin was pulled down by means of strapping, thus bringing the edges more nearly in apposition, and although it took longer for the fingers to heal, the stumps were just as good as could have been obtained had flaps been made, and with the great advantage of longer fingers. But really, why do

we not do more to assist our strongest ally by at least asking her to help in the repair of her most admirable production? Any butcher can hew away a mutilated limb, but only the patient student and lover of nature can and will use his best endeavors to carry out her plainly expressed wishes of repair.

COMPOUND FRACTURES OF THE LEG—WITH A CASE.

BY H. E. DUNLOP, M.D., Ph. G.,
House Surgeon to Alpena Hospital, Mich.

These are injuries upon which much has been written. They have commanded the attention of eminent surgeons of all countries and have taxed the skill and ingenuity of many acute observers to institute a plan of treatment which would give the surgeon satisfaction, and his patient the best possible result. When we consider the dangers, more or less serious, with which these fractures are fraught and the responsibility which the practitioner incurs in assuming the charge of such cases, he knowing the difficulties with which he has to contend to insure the happiest issue, it is not surprising that so much work has been done in this sphere of surgery. A number of cases of this class, one of which I will detail later on, have come under my observation in the last few years; and the plan of treatment pursued having been attended with uniformly good results, may not be uninteresting to many of your readers, especially those in country practice. There is no *one* line of treating these injuries which can be rigidly adhered to, but in the main it can be, making modifications where judgment would suggest a variation to suit the particular case. There is not the least doubt that many legs, which formerly would have been amputated, in the light of modern conservatism, and its hand-maid "antisepsis," can be, and are saved. In these, as in other breaks, proper coaptation of the bones should be obtained. All foreign bodies should be removed. If a nerve has insinuated itself between the ends of the bone, remove it. If an artery of importance has been wounded, secure it with a ligature, then cleanse the wound thoroughly with some antiseptic solution, as bichloride of mercury (1 in 2000). Now the bones can be nicely placed in position by extension and counter-extension. This being done it should be put in a fracture box, previously arranged, filled with bran, so packed as to insure the desired pressure on the different portions of the limb. The foot is then bandaged snugly to the foot-pieces and a roller applied just below the knee and about the box to insure perfect quiet. The wounds, if extensive, should be drained and under any circumstances receive vigorous antisepsis, there always being danger of death from septicæmia in these injuries. A good dressing is to dust the wound with iodoform and cover with bichloride of mercury gauze. Pressure on the heel is oftentimes a very troublesome and painful complication; Prof. Williston Wright, of New York (University Medical College), advocates a very simple and efficient means for its relief as follows: "A piece of adhesive plaster, say 18 inches long by 2 inches wide, is cut in half and stuck together in such a manner that the sticky surfaces oppose each other. Then cut an ellipse, sufficiently large to admit of the heel, out of the portion you wish to apply to the leg. Now fit the heel to the slit, stick the plaster to the leg and the remaining portion can be brought up over the foot-piece and pressure controlled at will." The fracture box, it seems to me, has two chief advantages in the first stages, viz.: (i) One is enabled to examine the wound each day and cleanse it if necessary. (ii) If there be any displacement it is readily discovered and is easily remedied by making appropriate pressure with the bran (a clean linen towel should in every instance be placed between the bran and leg). Tight bandaging is mentioned only to be condemned. The leg may remain in this dressing until union is firm and the wounds are healed. Many surgeons, however, after all swelling is gone and union has nicely commenced, prefer the use of an immovable dressing. I have tried that plan with good results. It will always be found prudent to leave apertures in the bandage corresponding to the wounds in the limb, for the escape of discharges and the cleansing of the parts, thus lessening chances of sepsis. The bandage should be kept on four or five weeks and if union is not satisfactory should be readjusted. Plaster of Paris when properly applied makes a neat and admirable dressing. Pasteboard is convenient and serves a good purpose in many instances. Starch is highly lauded by some, but I must confess my experience with it has not been such as to warrant its con-

tinued use. I claim no priority to this mode of handling compound fractures, as some of the ideas are old, but I had hoped to add my quota to the settling of mooted points in connection with their treatment, and my issues having been good, there is no reason why others cannot have like success with judicious management, instead of resorting to more complicated and newer means. I append the account of a case which will show more explicitly the good results following such a course.

John K., American, æt. 20, unmarried, laborer. He was working in the lumber camps driving a team. One day while taking a load of logs (2000 feet) on the ice-road to the landing, he became cold, jumped off and ran in front of the team to keep warm; he slipped and fell, and before he could regain his feet, the fore and hind runners passed over his right leg. He was brought to the hospital and found to be suffering from a compound and comminuted fracture of the tibia and fibula, complicated with denudation of the periosteum of about an inch of the tibia, and other wounds below the seat of fracture. The wounds over the breaks were extensive, and the tissues almost moribund. The leg was well cleansed of all foreign substances and thoroughly irrigated with carbolized water. It was then put in a fracture box, the pieces of bone coaptated and secured as nearly as possible in that position by extension. In spite of this, however, the fragments of the fibula showed a constant tendency to sag downwards and outwards. To overcome this I let union take place to a certain degree in that position, then, with a little force applied, the bone was easily put in a good position. The wounds were healing kindly by granulation, and after five weeks were in good condition. But two of the fragments of the tibia failed to exhibit union; after waiting some time it was decided to rub the ends together. Accordingly this was done, the patient being under ether, and the leg immediately put in a pasteboard splint. Shortly after this operation (about 6 p.m.) the patient had a severe chill, followed by a temperature of 103° and a pulse of 120, small and wiry. I suspected sepsis, had hot bricks placed to his feet, covered up very warmly, and administered quin. sulph. gr. xx; ext. ergotæ fl. ℥ xx; et. sp. vini. gal. ℥ss. Next morning he awakened much refreshed, with pulse and temperature normal. The pasteboard was left on for three weeks. When removed, union had fairly begun and the wounds looked well, union being good in the fibula. A plaster of paris splint was now put on and allowed to remain for four weeks. On its removal, union had improved, but not being sufficiently advanced I readjusted the splint. The wound above the obstinate seat of union remained partly open, which I attributed and found to be due to necrosed bone. Several sequestra separated. The wound healed, leaving a good straight leg with very little shortening, the man having taken his wonted position in the lumber woods.

Correspondence.

ATRESIA OF VAGINA.

To the Editor of the CANADA LANCET.

SIR,—Thinking the following may be of interest to your readers, I send it to you for publication. On Feb. 3rd last a stout, well developed, healthy looking child, one year old, was brought to my office exhibiting atresia of vagina, due to incomplete development. The labia majora and minora were completely adherent, the orifice of the urethra being prominent in front and about the size of a small quill. Held on the lap of an attendant I, without using an anæsthetic, separated the labia and vaginal walls to the extent of an inch by means of the fingers, and ordered oiled lint to be kept in place by means of suitable bandage; the parts to be dressed daily and fresh lint inserted. I heard no more of the case till June 30th, when on examination I found her completely cured, the vagina being patulous and other organs normal. A simple procedure performed at this age, causing little pain and little shock to the system, prevented the necessity of a more serious operation twelve or fourteen years hence.

Yours, etc.,

Oil Springs, Ont., A. R. HANKS.
August 10th, 1888.

OUR NEW YORK LETTER.

From our Own Correspondent.

NEW YORK, Aug. 20th.

STATE EMIGRANT HOSPITAL.

One of the most interesting questions to the American people to-day is that of emigration. A

great many people think there is altogether too large an emigration of an undesirable class, and that greater restrictions should be placed on the emigrant being allowed to land. Certain it is that, practically, there are but few restrictions, and but a very small per cent. are sent back to their own country. Paupers, criminals, insane, pregnant unmarried females, and persons likely to become a burden on this country, are supposed to be sent back, but only a percentage of these are, owing to the difficulty in detecting them. I will say nothing further of that, but devote the remainder of this letter to showing how the sick and destitute emigrant is treated when he lands here. First of all, the steamship companies pay a tax of 50c. *per capita* on all foreigners they land, they in turn receiving this from the emigrant in selling him his ticket. This fund is used in maintaining Castle Garden and the State Emigrant Hospital and Refuge. So that the emigrant supports these institutions, and does not become a charge upon the country. Emigrants entering the port of New York, go to Castle Garden, where they are either allowed to land, or are detained on account of sickness, or for the purpose of being sent back. The "detained" are sent to the Hospital and Refuge on Ward's Island, where those sick are treated, and those to be returned are kept until the ship on which they came over, sails back. Emigrants having landed, and being in this country less than a year, are sent to this hospital if they become sick during the year after their landing.

It will be seen that the field from which the State Emigrant Hospital draws its patients is a large one—the whole world. There were represented, in the wards of the hospital last year, twenty-nine nationalities. There were 2,705 patients treated last year, of whom the largest number were German, Irish, Italian, then Russian, English, Swedish, and more or less of each of the other nationalities. Not over twenty-five per cent. can speak English. When I first came here in May, I expected to be very much handicapped in arriving at a diagnosis, on account of this difficulty in speaking to the patients, but have since learned to appreciate the fact that the patient being unable to describe his symptoms is not an unmitigated evil, as he is, at the same time, prevented from misrepresenting or magnifying them. It simply makes a person pay more attention to physical signs, and look more closely for positive symptoms, than depending too much on the patient's own description.

With a little knowledge of German, and occasionally the aid of an interpreter, one gets along very well. The class of diseases is as varied as are the patients themselves, but there is, of course, a very large preponderance of acute over chronic cases.

The main hospital is a large, red brick building, and is an ideal hospital, both in the way in which it is built, and in the way in which it is conducted, there being no hospital in New York which is cleaner and better kept. There are ten wards of thirty beds each, the wards being entirely isolated from one another. During the summer months the male patients are removed from the main building to four wards, entirely separate from the main building, and built for this purpose. This allows a thorough disinfection of the hospital every summer. In another large building, of ten wards, and beds for 100 patients, the contagious and infectious diseases are quarantined. There are usually from forty to sixty patients in quarantine. A large proportion of measles that come here is complicated by broncho-pneumonia, and a great many by diphtheria. This is accounted for by the fact that the patients take sick on board ship, are exposed to the weather, and to contagious diseases on the vessel, have been poorly fed and clad, and, by the time they reach here, a large number are pretty sure to get up broncho-pneumonia, and are fortunate if diphtheria does not still further complicate the measles.

In the Insane Asylum there are forty patients. Last year the 2,705 patients were distributed into medical wards, 1,122, surgical 579, children 257, quarantine 427, obstetrical 131, insane 188. The mortality rate (exclusive of insane) of hospital proper was 5.2 per cent., which is unusually low, as low if not lower than that of any other hospital in the city. This is particularly good when the class of patients, and the large number of acute cases are taken into consideration. Doubtless the situation of the hospital on Ward's Island, where there is plenty of fresh air, and where the hygienic surroundings are good, has much to do with it. There is a resident staff of four physicians, and a Consulting Board of seven. There are in addition to the hospital, other buildings for the destitute and de-

tained people, and altogether accommodation for over 1,500 persons, and which can be made use of should an emergency arise or an epidemic break out. Two years ago there were 2,000 people here, some patients, others quarantined on accouut of small-pox on the vessels they came over on. Small-pox is now taken to the small-pox hospital on North Brothers' Island.

In another letter I will give in detail the man agement of obstetrical cases, and the lying-in-ward.

CANUCK.

Selected Articles.

ON THE TREATMENT OF HABITUAL CONSTIPATION IN INFANTS.

Sluggishness of the bowels in infants is a common source of trouble in the nursery, and the derangement is one which it is not always found easy to overcome. Occasionally aperients in such a case give only passing relief. The bowels, indeed, are unloaded for the time, but when the action of the aperient is at an end, they are left no less sluggish than before. Habitual constipation is very common in infants who have been brought up by hand; and on inquiry, the trouble will often be found to date from the time at which bottle feeding was begun. Still, infants at the breast are not exempt from this annoying derangement. A deficiency of sugar in the breast-milk, or, as is sometimes seen, a milk the curd of which makes a firmer clot than is common in human milk, will often cause habitual torpor of the bowels which resists treatment with some obstinacy.

It is, no doubt, to improper, or at any rate inappropriate, feeding that the bowel trouble is usually to be referred. An excess of starch in the diet, or any food which overtaxes the child's digestive power and thus burdens the alimentary canal with a large undigested residue, may set up the costive habit. By such means a mild catarrh of the intestinal mucous membrane is excited and maintained. There is excess of mucus, and the fæcal masses, rendered slimy by the secretion, afford no sufficient resistance to the contractions of the muscular coat of the intestine, so that this slips ineffectually over their surface.

Another cause of constipation is dryness of the stools. Even in the youngest infants the evacuations may sometimes be seen to consist of little round hard balls, often the size of sheep droppings, which are passed with difficulty every second or third day. This form of costiveness is generally due to insufficiency of fluid taken. The food is made too thick, or the needs of the system in the matter of water are in some way overlooked. But whether the constipation be due originally to excess of mucus or deficiency of fluid, it cannot continue long without affecting injuriously the peristaltic movement of the bowels. As the colon grows accustomed to be over-loaded, the intestinal contents can no longer exert a sufficiently stimulating influence upon the lining membrane, and the muscular contractions begin to flag. If the infant be poorly fed and badly nourished, this languor of muscular contraction may be aggravated by actual weakness of the muscular walls; and as under these conditions the bowel is apt to be over-distended by accumulation of its fæcal contents, the expulsive force at the disposal of the patient is seriously impaired. Constipation, resulting from the above causes, is often made more obstinate by the infant's own efforts to delay relief. A baby whose motions are habitually costive knows well the suffering which undue distension of the sphincter will entail, and often yields to the desire to go to stool only when it is no longer possible for him to resist it. The pain is sometimes aggravated by the formation of little fissures about the anus, and the violent contraction of the sphincter set up by the presence of those fissures forms an additional impediment to free evacuation.

There is another form of constipation in infants which we should be always vigilant to detect. This is the torpidity of the bowels induced by opium. In well-to-do families the use of soothing syrups and other narcotic preparations is now less common than was at one time the case; but now and then we find a baby drugged for reasons of her own by an unscrupulous nurse, and showing the earlier symptoms of narcotic poisoning. So long as the sedative continues to be given the bowels are costive, the child often vomits, his relish for food in great part disappears, and he lies with pupils firmly contracted in a dull, heavy state from which he cannot easily be roused. In young babies the use of opium seems to lessen the action of the kidneys, the urine is scanty, and on examination of the surface of the body the healthy elasticity of the skin will be found to be seriously impaired. When pinched up between the finger and thumb the skin lies in loose folds on the abdomen or only slowly recovers its smoothness. If this inelasticity of skin be noticed in a baby whose pupils are closely contracted, and who seems habitually heavy and drowsy, with little relish for his food, it is well to remember that these symptoms may possibly be due to the action of a narcotic.

An infant whose bowels are habitually costive is not necessarily injured by the want of a daily relief. Often the child seems perfectly well in health, and, except for occasional local discomfort when he gets rid of an unusually large or hard mass, may appear to suffer no inconvenience at

all. In other cases there is flatulent distension or frequent colicky pain, the child sleeps badly, has a furred tongue, and cares little for his food; the motions are often light colored from undigested curd, and are passed with violent straining efforts, during which the bowel may prolapse or the navel start. This straining is a not uncommon cause of hernia.

In remedying this condition attention to the feeding and clothing of the baby is of little less moment than the use of drugs. When the infant is at the breast a teaspoonful of syrup given three or four times a day before a meal will often quickly restore the normal regularity of the bowels. If the stools are habitually dry and hard, we should see that the child takes a sufficiency of liquid with his food. In addition, it is useful now and then to make him drink some plain filtered water. In the case of a baby in arms, the possibility that the child may be thirsty and not hungry seems rarely to be entertained; but in warm weather, when the skin is acting freely, the suffering amongst young babies from want of water must often be acute. At such times the urine is apt to be scanty and high-colored, and may deposit a streak of uric acid on the diaper. When fluid is supplied, the secretion both from the bowels and the kidneys quickly becomes more healthy; and a desert-spoonful of some natural saline aperient water, given at night, aids the return of their natural consistence to the stools.

The form of constipation which is due to mild intestinal catarrh is common enough in young babies. This is owing, no doubt, in great measure to over-abundant feeding with starchy matters, or to the giving of cow's milk without taking due precautions to ensure a fine division of the curd. Still it cannot be denied that we sometimes find the same derangement in infants whose diet is regulated with proper care and judgment. In them the intestinal catarrh is frequently the consequence of exposure, for the sudden withdrawal of all protection from the lower limbs and belly which the process known as "short-coating" too commonly involves is a fruitful cause of chill. In children so denuded, the feet and even the legs as high as the knees may be quite clammy to the touch. Under such conditions the susceptibility of the patient to alternations of temperature must be extreme, and the bowels are, no doubt, often kept in a state of continued catarrh from rapidly recurring impressions of cold.

Where the constipation is due to this cause our first care must be to protect the infant's sensitive body so as to put a stop to the series of catarrhs. To do this it will not be sufficient to swathe the belly in flannel. The legs and thighs must also be covered, for a lengthened experience of these cases has convinced me that so long as a square inch of surface is left bare the protection of the child is incomplete.

We should next see that the infant's dietary is regulated with due regard to his powers of digestion. Excess of starch must be corrected, and it is best to have recourse to one of the malted foods. Mellin's food is especially valuable in cases where there is this tendency to constipation, as is in many children the food has a very gentle laxative effect; but as Mellin's food contains no unconverted starch, and can do nothing to prevent the formation of a dense clot when the curd of milk coagulates in the child's stomach, it is advisable, when giving it with milk, to ensure a fine division of the curd by the addition of some thickening material such as barley water. A child of six months old will usually digest well a good dessert-spoonful of Mellin's food, dissolved in milk, diluted with a third part of barley water. A certain variety in the diet is of importance in all cases where the digestive power of the infant is temporarily impaired. Therefore, it is advisable to order an additional food to be given alternately with the Mellin and milk. Benger's "self-digesting food" is useful for this purpose, and rarely disagrees. It must be given, like the Mellin, with cow's milk, but without the barley water, for the pancreatine it contains has a digestive action upon the curd, and removes the tendency of the latter to firm coagulation. In addition to the above, if the child has reached the age of ten months, he may take a meal of veal broth or beef-tea once in the day, and with this it is advisable to give some vegetable, such as broccoli or asparagus, thoroughly well boiled. At this age, too, the milk for the morning meal may be thickened with a teaspoonful of fine oatmeal, and sweetened with a teaspoonful of malt extract. In the case of many infants suffering from habitual constipation, the appetite is very poor, and great difficulty is found in persuading them to take a sufficient quantity of nourishment. This indifference to food is almost invariably associated with coldness of the extremities, and usually disappears when measures are taken to supply necessary warmth to the feet and legs.

In all cases where an infant's bowels are habitually costive, it is of the first importance to enter thoroughly into these questions of clothing and diet. In addition, care should be taken that the bowels are regularly stimulated by manipulations from without. The sluggishness of peristaltic action which forms a part of every case of habitual constipation may be very materially quickened by judiciously applied frictions. The nurse should be directed to rub the child's belly every morning after the bath. She should use the palm of the hand and ball of the thumb, and, pressing gently down upon the right side of the abdomen, carry the hand slowly round in a circular direction following the course of the colon. The frictions may be continued for five minutes. In obstinate cases the child may be laid down upon the bed, and the

bowels gently kneaded with the thumbs placed side by side; but in this case, too, the movements should follow the course of the larger bowel.

In addition to the above treatment, more special measures have often to be employed. These may be divided into two classes: the class of suppositories and injections, and that of remedies given by the mouth.

The class of suppositories and injections aims at producing an immediate evacuation of the bowel, and in no way tends to promote more regular action in the future. These remedies are, therefore, useful in clearing the way for further treatment, but there their value ends. A suppository of Castile soap introduced into the rectum is a time-honoured method of inciting an evacuation in the child. Another old-fashioned plan has lately been revived, which consists in the injection of forty or sixty drops of pure glycerine into the lower bowel. In each case energetic peristaltic action of the alimentary canal is induced, and the bowel is thoroughly emptied of its contents. Of these applications the action of the glycerine is very rapid, and in a few minutes the effect of the injection is seen. The soap suppository acts more slowly.

Injections of soap and water, or other liquid, have an entirely mechanical action in relieving the patient. To be effectual such injections must be large, consisting of at least half a pint of fluid and should be thrown very slowly into the bowel. Still, although of service when given only occasionally, the frequent use of large injections is not to be recommended; indeed, this method of treatment is distinctly hurtful in cases where the costiveness has become a habit. Even in young babies great dilatation of the bowel and serious weakening of its muscular coat have often followed the daily use of the enema pump.

For the permanent cure of habitual constipation remedies given by the mouth are greatly to be preferred, but, at the same time, strongly acting purgatives are worse than useless. Our aim should be to find the smallest dose which will awaken a normal degree of energy of peristaltic action, and to give this dose regularly so as to induce a habit of daily evacuation. The daily dose is most efficacious when combined with a remedy which tends to give tone to the muscular coat of the bowel. For this purpose a useful draught is composed of half a drop of tincture of nux vomica combined with ten drops of tincture of belladonna and twenty of infusion of senna, made up to a fluid drachm with infusion of calumba. This draught should be given at first three times a day before food, but soon two doses in the day will be sufficient, and it is rarely long before one dose given at bedtime has a sufficiently laxative effect. Our object is not to excite watery evacuations, but to induce as faithful imitation as possible of a normal action of the bowels. The liquid extract of cascara is useful in many cases, especially if combined with tincture of belladonna. Twenty, thirty, or more drops of cascara extract with ten of the belladonna tincture, may be given with a few drops of glycerine in a little water every night. In the west of England a remedy held in high esteem consists of half a grain of sulphur colored red with cochineal. That this apparently insignificant dose is often efficacious when given regularly every night I can testify from my own experience.

In cases where the motions are drier than natural, as if from imperfect secretion of the intestinal glands, the addition of liquid to the diet, already recommended, may be supplemented by the administration of some saline aperient two or three times a day. This treatment is made more effectual when the saline is combined with small doses of nux vomica and quinine. For a baby of six months old, five to ten grains of sulphate of soda may be given with one quarter of a grain of quinine, half a drop of tincture of nux vomica, and a minim of aromatic sulphuric acid, in a teaspoonful of water three times a day before food. As in all cases where the remedy prescribed has been chosen with judgment and given in appropriate quantity, the continued administration of this draught, so far from rendering the bowel dependent upon the medicine, stimulates it to act spontaneously, so that the dose has soon to be given less frequently, and in no long time can be discontinued altogether.

By means such as the above the most obstinate case of constipation in the infant can be cured with little difficulty, but to be successful the treatment must not be restricted to mere drug-giving. The food of the child must be regulated with care, his clothing must be inquired into, and his general management passed under review Where this is done, drugs given in comparatively small doses will act with sufficient energy, and will soon restore their normal regularity to the bowels.—*Brit. Med. Jour.*

RECENT ADVANCES IN THE PHYSIOLOGY AND PATHOLOGY OF INFANT DIGESTION.

Recent investigations undertaken by two French physicians, Drs. Hayem and Lesage, of the stools of children suffering from green diarrhœa, revealed the presence of large quantities of a short, spore-forming bacillus, which, cultivated on potato or meat peptone gelatine, gave origin to a spinach-green pigment. The bacillus grows freely in neutral or alkaline media; lactic, hydrochloric or citric acids arrest its development. The addition of a few drops of lactic acid to the gelatine prevents the development of the microbe. The injection of a cubic centimetre of the pure cultivation of

the bacillus into the veins of young rabbits, caused green colored stools that contained the characteristic green color bacteria. Lesage declares the green diarrhœa of dyspeptic children to be a contagious bacillary disease. Assuming the clinical and bacteriological facts to be correctly stated, one point stands prominently out, and in fact, dominates the rest. It is that, before these microbes can develop in the intestinal tracts of children, and give rise to their green-colored diarrhœa stools, there must have been an alkaline reaction at some portion of the tract, for it has been shown that they cannot grow in any part where the reaction is acid.

The bearing of what has been stated on treatment, both prophylactic and remedial, is self-evident. In the first place food must be given, at least when the disposition to dyspepsia shows itself, in a perfectly sterile form, and in the second, remedial treatment will naturally fall into a disinfectant groove. The author recommends the Soxhlet milk-cooking process as admirably answering all the requirements as regards prophylaxis. This is shortly as follows: Bottles are used that contain just the quantity required for one meal, so that none is left over when once the bottle has been opened. The bottles are provided with a well fitting india-rubber cap, in the centre of which is fitted a solid glass rod. When the feeding time arrives this rod is exchanged for a glass tube to which the teat is attached. The sterilising takes place in a water bath, by continued boiling for forty minutes.

As regards therapeutics, mechanical flushing is placed in the front rank. As the author remarks, the bodily removal of fermenting and decomposing intestinal contents by washing out of the stomach and large intestine is a more efficient therapeutical process than internal administration of any antiseptics, concerning which—with the solitary exception of calomel—it is not certain whether they can be given in doses large enough to be effective. That washing out of the stomach after Kussmaul's method is practicable and useful in children, is shown by the writings of such practitioners as Lorey, Friedlander, Epstein, Biedert, Ranke, Thomas, Escherich, Hirschsprung, and Ehring, all of whom have reported favorably of it. The apparatus recommended for the purpose by Epstein is a sort of douche, with tubing of suitable size, a Nélaton catheter, Nos. 8 or 10 serving as œsophageal tube. Washing out the stomach is indicated, according to our author, in both acute and chronic dyspepsia, in dyspeptic intestinal catarrh, and in Brechdurchfall (vomiting and purging). Regarding the last-named affection, it is to be noted that from a therapeutical point of view it is of the greatest importance to empty the stomach of the remnants of food and the poisonous products of decomposition that are generally the cause of the disease. The immediate and visible effects of the washing out are the immediate cessation of the vomiting, and an increased tolerance of fluid food, which, as Epstein recommends, should consist exclusively of white-of-egg water until the diarrhœa is stopped. The washing out has to be repeated once or twice a day until the cure is complete—washing out of the large intestine, again using Nélaton's catheter, for the intestinal tube has already gained too firm a footing in Germany to require any further recommendation for German readers.

The stomach and large intestine have now, we will suppose, been washed out and thoroughly disinfected, but the small intestine still remains in an unsanitary condition. What is to be done with it? It cannot well be washed out, and the only way out of the difficulty is, if possible, to give only such food as is not subject to fermentation. Hirschler has ascertained by experiment, as has already been pointed out, that in the small intestine it is principally the saccharolytic kinds of bacteria that are active. Escherich therefore pleads for the absolute exclusion of sugar from the dietary of children whilst under treatment for affections of the small intestine. A diet consisting of albumen and peptones he believes to be an unfailing means of avoiding the noxious fermentation processes. We may be permitted to point out that the dietary now recommended by Escherich, as the latest outcome of physiolgical investigation, is singularly like that recommended by the father of modern medicine, the British Sydenham, 200 years ago, who enjoined an exclusive dietary of weak chicken broth in summer diarrhœa.—*Med. Press and Circular.*

SIMPLE AND RAPID STAINING OF THE TUBERCLE BACILLI, FOR THE GENERAL PRACTITIONER

Although the causal relation of the tubercle bacilli to pulmonary phthisis may be questioned by some, no one, we think, can deny the diagnostic importance of their presence in the sputum.

The ability to recognize them enables the physician to diagnose the character of pulmonary disturbances earlier than he can possibly do it either by physical signs or any other symptoms. If the technique of the staining of the tubercle bacilli can be reduced to a simple form, so simple that no special technical training is necessary, then I believe that this most important aid to diagnosis would be as constantly employed by the practitioner as the chemical and microscopical examination of the urine in suspected cases of Bright's disease.

The methods at present generally adopted in the laboratories—the Koch-Ehrlich method—is a

complicated process requiring much practice and judgment, especially in the decolorization of nitric acid; it is not consequently adapted to the general practitioner's use, and will yield reliable results only in the hands of experts.

The belief that any technique which is simple and rapid, and reduces the staining of the tubercle bacilli to a mechanical basis, would be of use to the general practitioner is my reason for presenting the following method, which I have used for some time with uniformly satisfactory results.

While working with Professor Koch last spring, I found that in his personal examinations he made use of a solution of fuchsine known as Ziehl's solution, and hardly ever had recourse to a double staining.

To an expert, this gives without doubt the quickest staining possible, but because of the weakness of the solution, if made according to Ziehl's formula with the ordinary fachsine purchased in this country. and of the lack of a contrast color, it does not yield satisfactory results to others. Making use of the principle which Ziehl has incorporated in his solution, viz., that carbolic acid can be substituted for aniline oil, I first stain the bacilli with a very strong solution of carbolic fuchsine, and then make the contrast staining by what is known as Fraenkel's solution, which combines the decolorizing and dyeing in one process.

This furnishes a specific staining for the tubercle bacilli—a deep-red color; the other elements in the sputum, the putrefactive bacteria, the puscells, the epithelium, taking the second color—blue.

The advantages of the method which I propose are these:

1. Simplicity; one solution is poured on the sputum and then the other, with no judgment necessary as to the amount of staining or to the decoloration; this makes the process simply a mechanical one.

2. Quickness and precision; the whole process occupying but two minutes.

3. The great intensity of color with which the tubercle bacilli are stained.

4. The solutions keep indefinitely, especially the carbolic solution, which cannot decompose like the aniline water solution of fuchsine; they are therefore always ready for use.

The Method of Preparing the Solutions.—First: The Fuchsine Solution. 1. Pour into a small bottle of alcohol, say a four ounce bottle, enough fuchsine to form a well-marked layer over the bottom of the bottle, or, in other words, more than enough for a saturated solution. 2. Let it stand for twenty-four hours, shaking the bottle from time to time. 3. Into a four-ounce bottle, containing a five per cent. aqueous solution of carbolic acid, pour enough of the first solution to produce a distinct precipitation of the fuchsine, say, about ten or fifteen cubic centimetres—the exact amount is not important. 4. Shake a few times and set aside for twenty-four hours. This is the carbolic solution of fuchsine to be used.

Second: The Methylene-blue Solution. Put into a four-ounce bottle,

Alcohol	30 parts.
Distilled water . . .	50 "
Nitric acid	20 "

and add methylene-blue until the solution is more than saturated.

The Method of Staining the Sputum.—1. Prepare two cover-glasses in the ordinary way, by placing a small portion of the suspected sputum on one cover-glass and, by means of the other, pressing it out between them into a thin layer; on sliding the cover-glasses apart, a thin film of sputum will be left on each cover-glass. Allow the cover-glass to dry, and then, holding them firmly with a pair of forceps, prepared side uppermost, pass them rapidly three times through the flame of a spirit-lamp. 2. Hold cover glass as before, and pour on it a few drops of the fuchsine solution. Then warm the cover-glass over a spirit-lamp until steam rises, being careful not to allow the fluid to boil; now let the solution on the cover-glass cool. 3. Pour off the fuchsine solution. 4. Pour on the cover-glass the methylene-blue solution, and after half a minute or so, the exact time is not important—5. Wash off the stain carefully with running water (a wash-bottle is convenient). 6. Dry the surface of the cover-glass which does not contain the sputum. 7. Mount on a slide in water and examine.

A little practice will enable one to carry out this simple technique with great rapidity; the only difficulty is in preparing the solution at first, but, as they will keep for months and are always ready for use, this is not of much moment. One great advantage to the practitioner will be the doing away with all dishes, acids, etc. The two bottles always stand ready, and when necessary the sputum can be examined while the patient is in your office. To emphasize the quickness of the process, the whole formula can be stated in four lines.

1. Pour your fuchsine solution on prepared cover-glass.

2. Heat and then allow to cool.

3. Pour off solution and pour on methylene-blue solution.

4. Pour, wash this off, dry, and mount in water. —*H. P. Loomis, M.D., in Med. Rec.*

THE CHIAN TURPENTINE TREATMENT OF CANCER.

Chian turpentine, the internal administration of which as a remedy for cancer has been recently recommended anew by Professor John Clay, obstetric surgeon to the Queen's Hospital, Birming-

ham, England, is a product of the *Pistacia terebinthus*, a tree which in its native island of Scio, in the Mediterranean, grows to the height of thirty or forty feet. The gum is obtained from incisions into the bark, and the many impurities which it contains are composed of sand, leaves, straw, and particles of bark and fruit. As Professor Clay insists that its efficiency depends upon the genuineness of the drug, it is well to carefully consider the following discription from Flückiger and Hanbury's "Pharmacographia.":

"Chian turpentine, as found in commerce and believed to be genuine, is a soft solid, becoming brittle by exposure to the air; viewed in mass, it appears opaque and of a dull brown hue. If pressed while warm between two slips of glass, it is seen to be transparent, of a yellowish brown, and much contaminated by various impurities in a state of fine division. It has an agreeable, mild terebinthinous odor, *and very little taste.* The whitish powder with which old Chian turpentine becomes covered shows no trace of crystalline structures when examined under the microscope."

It is believed that Strassburg and Venice turpentine and Canada balsam are often substituted for it, which can usually be easily detected by applying the tests as to taste, odor, and appearance given above. The turpentine, as used by Clay in the first reported case (*Lancet*, March 27, 1880), was given in the form of a pill, containing three grains, combined with two grains of flowers of sulphur. Two of these pills were given every four hours for many weeks, and some cases for nearly a year. It was found that in some instances the turpentine in the pill form was not well digested, and the latest recommendation of Professor Clay is to administer it in an emulsion made as follows:

One ounce of the Chian turpentine is to be dissolved in two ounces of pure sulphuric ether. This solution has been termed the turpentine essence, and the emulsion is made by adding one ounce of this essence to a mucilage of acacia (one ounce and a half of powdered gum arabic and water to nine ounces), making a ten-ounce mixture, a teaspoonful of which contains about three grains of the drug. A dessertspoonful, it will be observed, contains the same amount of turpentine as the two pills which were previously recommended. In some cases resorcin has been added in doses of a grain. This emulsion is not of a disagreeable taste, as nearly all my patients who are under the treatment testify. Tonics have been used when indicated. In some instances local applications have been made, in others this internal remedy alone has been employed. When it has been taken for about three months it should be omitted three days in every fortnight. The sulphur is often given in a separate pill, especially in cancer of the uterus and rectum. I have given this description of the plan and exhibited the preparations in order that we may have an accurate knowledge of of what this China turpentine treatment really is.

We are all familiar with the statements which Professor Clay has repeatedly made concerning its efficacy. He has seen a number of complete cures, not only of uterine cancer in advanced stages, but also of cancer of the rectum and surface epitheliomata. In cancer of the breast he reports marked improvement of symptoms and complete arrest of the new growth. No report has yet been pubiished, as far as I can learn, stating the precise changes in the tumor, but he maintains that the primary action is upon the periphery of the growth. The plan has been tested in the London Cancer Hospital, and, after a tolerably thorough trial, condemned by Dr. Marsden and Mr. Purcell. Another trial has recently been made, however, and one of the surgeons of the same hospital declairs the Chian turpentine to be a very useful remedy in many cases.

In the *Lancet* for November 22, 1887, the editor says there can be no doubt that Professor Clay's report of cures are trustworthy, and that it can hardly be possible, with a man of his large experience, that they were *all* cases of mistaken diagnosis. He advised a continued trial of the remedy. The drift of pathological research is now strong in the direction of a specific origin of the disease, to which theory Sir James Paget expressed a qualified preference in his recent "Morton Lecture." To cure by internal treatment may, in the next decade, become as possible in cancer cases as it has long since become in syphilis.

My own experience is still too limited to be of much value. Several patients in my service at the Skin and Cancer Hospital have been under the treatment of varying periods—from one to six and eight months. All take the remedy well, by giving them a brief rest occasionally. A cancer of the uterus has been greatly benefited; pain has decreased, hæmorrhage has ceased, and granulations have become healthy. A large epithelioma of the face has decidedly changed in character. In some no effect whatever has yet been noted. We shall watch the cases with great interest, and give a full report to the profession.—*Dr. Daniel Lewis, in N.Y. Med. Jour.*

THE TREATMENT OF BRONCHO-PNEUMONIA IN CHILDREN BY APPLICATION OF ICE.

Having now treated many cases of severe broncho-pneumonia in children and infants by means of ice-bags, it seems desirable, owing to the success attending such treatment to urge the profession to consider its more general adoption. The cause of the broncho-pneumonia does not, in my ex-

perience, influence the employment of the ice-bag. It may be used with much success even in cases of broncho-pneumonia secondary to tracheotomy, but still more favorably in cases of influenza and measles. The smaller the child the more marked are its effects. In very small infants under one year of age the ice-bag may be placed on the head, the hair having previously been thinned and shortened if necessary. The treatment to be successful must be carried out with a will and systematically. As a general rule, the rectal temperature affords the best guide to the application of cold, and those acquainted with broncho-pneumonia well know the highly marked remittent or almost intermittent character of those affections. Ice-bags have the drawback that they often give rise to a little wetting of the child, but this has not, in my experience, proved injurious to the patient. Leiter's tubes have been tried, and have some advantages, being especially valuable when an intelligent nurse is in attendance. The condensation of moisture caused by the cold is of course inevitable, but this wetting may be rendered harmless by covering the ice-bag or Leiter's tubing with a layer of Hartmann's wood wool or the compressed moss sphagnum. In severe cases, where a rapid effect is required, two ice-bags have been placed on the head, and one over the chief seat of consolidation in the lungs. With a little management it is not difficult to keep these in place; certainly not when the neuromuscular prostration is marked, as it almost always is in severe cases. The chief merits of this treatment consist in the maintenance of the strength, not only of the heart, but also of the respiratory centres and of the nervous and muscular systems. Although otitis media occasionally occurred, yet this has not been more frequent than in cases treated without cold. Albuminuria is not rendered worse by the cold, nor have any cases of hæmaturia been observed. The urine has, at some trouble been specially collected and tested in small infants. The duration of the disease is, on the whole, shortened. Convalescence is almost invariably rendered more rapid, doubtless because of the conservation of the child's energy.

It is superfluous to assert that ice does not merely act by stealing heat; its action is almost exclusively sedative. Physiologists would aver that it increased inhibition, and in that way made wrong right; because disease simply lowers resistance in the vital processes, and curative measures raise it. Ice influences different organs differently, and this is most noticeable in the various parts of the nervous system. Its action on the cortex of the brain is, perhaps, most evident in the production of sleep, restless movements rapidly subsiding if the cold be efficiently applied; probably, therefore, the whole system of motor centres and sensory centres is soothed, because morbid sensations and morbid motions tend to cease. On the heart and circulation the influence is also decided, but this influence is probably exercised directly and indirectly; for not only does the cold directly quiet the heart and steady the circulation, but the calming of the nervous system also acts indirectly in the same direction. The respiratory centres are similarly beneficially affected.. The heart-regulating apparatus manifests most clearly the same beneficent action, and the temperature chart shows a similar harmonious effect. It is curious to observe the almost immediate cooling of the whole surface of the body soon after the application of ice to any part, this cooling effect being perhaps best marked when the ice is applied to the head; the hands, previously red and hot, become cool and slightly blue. The change is decidedly favorable, notwithstanding the supervention of the signs of feeble circulation in the exposed parts of the skin. Vomiting and diarrhœa, alone or in combination, may require treatment in the cases under consideration; the cold method does not increase diarrhœa, and it certainly tends to stave off vomiting. The employment of cold does not obviate the necessity of using stimulants, either of the ordinary sort or such as act more especially on the heart and respiration. But cold renders them less necessary, and when they are required smaller doses are sufficient. There is, indeed, a saving of expenditure all round: the cost of the illness is lessened, and the illness costs the child less expenditure of reserve strength.—Angel Money, M.D. in *Lancet*.

ECLAMPSIA, WITH ALBUMINURIA. — Dr. J. H. Bennett, in the *Jour. Amer. Med. Assn.*—Mrs. H., aged thirty-five, multipara, was taken with convulsions at end of eighth month of pregnancy. At 4 o'clock in the morning of Sept. 28, I was called and found patient in a comatose state; face and hands, and, in fact, the whole body, œdematous to an uncommon extent. Being naturally plethoric, sixteen ounces of blood were taken from the arm, followed by ten grs. of calomel combined with ¼ gr. of elaterium. This procedure and treatment had a very happy effect in controlling the alarming symptoms. Elaterium was continued in ¼ gr. doses administered every three hours, with sixty grs. of cream of tartar, until thoroughly watery stools were secured, which reduced the œdematous condition almost entirely.

Believing that urea decomposing in the blood causes the phenomena of eclampsia, benzoic acid was administered (after the thorough watery evacuations were brought about) in eight gr. doses every three hours until the patient became conscious, after which the same treatment was continued, with the addition of wine of colchicum and guaiacum. As soon as the patient was able to do so, the knee and chest position was adopted and maintained at times when her strength would

allow of its use, thereby relieving in a mechanical way the pressure caused by the weight of the gravid uterus upon the renal circulation. The urine was frequently treated for albumen, and for the first few days the quantity was enormous, the test-tube showing that two-thirds to three-fourths of its contents was albuminous on reaching the boiling point. The bowels were kept well open with occasional doses of cream of tartar and elaterium, with a view of reducing the work of the kidneys. Her diet during this time was a generous and nourishing one. Labor commenced in about thirty days from the time she was taken with convulsions, which terminated very pleasantly in every particular to both mother and child in about two hours from its beginning. Considering the unfavorable circumstance of not being able to see my patient until taken with convulsions, the happy results of treatment adopted, and the short and easy labor, leaving mother and child in excellent condition, it impresses me as being worthy of more than ordinary consideration. The only addition to the treatment was an occasional dose of bromide of potash and hydrate of chloral to secure rest at night. An experience of nearly forty years in the practice of medicine, and the successful treatment of puerperal convulsions when this method was followed; varying, of course, according to condition of patient and indications observed, leads me firmly to believe in its efficacy. There are five important indications to meet. *First*, to relieve the congested brain and venous system by bloodletting; *second*, to relieve the œdematous condition usually present, by administering drastic cathartics; *third*, to neutralize the carbonate of ammonia present in the blood by use of benzoic acid; *fourth*, to eliminate from the system urea, by the use of colchicum and guaiacum, thereby preventing its decomposition; *fifth*, knee and chest position, where it can be done, to relieve in a mechanical way the renal circulation.

TETANUS SUCCESSFULLY TREATED WITH STROPHANTHUS.—William W——, aged twenty-three, ballast man at the Penarth Docks, came under my care on Feb. 18th, 1888, suffering from severe burning pains between the shoulders, extending down the spine. Abdomen rigid; spasms of body, chest, arms, thighs, and legs; jaws locked; countenance anxious; face and mouth contracted; pulse quick and wiry; temperature (108°). He was in appearance a well-developed man; height 5ft. 8in. He stated that about three weeks previously he had the nail of the little finger of the left hand torn when at work, from which he suffered severe pain, and believes that it was frostbitten while following his employment (the cause of his illness). Being constipated, I gave him a full dose of white mixture, which he had great difficulty in taking on account of the locked state of his jaw. I also prescribed a mixture containing large doses of bromide of potash and hyoscyamus, to be taken every hour for some days; and ordered liniments and poultices to be applied to the spine, abdomen, legs, and feet. The urine was dark and scanty, without any deposit. Beef-tea, mutton broth, milk-and-water, and lemonade were given often, as only very small quantities could be taken at a time. No improvement taking place, I was determined to give strophanthus a trial, and for this purpose employed tabloids containing two minims in each; one was given every three hours, it being with difficulty placed in his mouth, and cold water was taken after each tabloid. About the second day after commencing the strophanthus I was pleased to find him decidedly improved. I could open his mouth sufficiently to introduce the mouth of a feeding cup. The spasms of the body, abdomen, and extremities became less frequent, the pulse quiet, and the temperature lower. I then continued the tabloids, gave another aperient, and ordered him, in addition to the beef-tea, broth, etc., corn-flour, custards, bread-and-milk, and bread-and-butter, which he commenced to take regularly, and which he had not been able to do for some considerable time previously. The urine was copious and clear. All the symptoms gradually became less. The strophanthus was now given only twice a day, and was soon discontinued. In a fortnight afterwards the man was able to walk and to take his usual food, the jaws being competent to perform their wonted work. He is at the present time quite restored to health, and is following his employment.—W. J. Clapp, M. R. C. S, etc, in *Lancet*.

ABORTIVE TREATMENT OF HAY FEVER.—Dr. Carl Genth, of Langen Schwalbach, makes a promising suggestion in connection with the therapeutics of hay fever. For the past ten years, a young medical man of his acquaintance has suffered so severely from hay fever, from the beginning of May to the end of June, that his practice has been seriously interfered with. He has tried all kinds of remedies without benefit. Quinine in large quantities alone produced favourable results, but not before symptoms of poisoning presented themselves, including urticaria on each side of the spine, following the course of the chief nerve-branches down the arms and legs, and finally covering the whole body. In many cases of hay fever Dr. Genth found that the first symptom of the disease was acute conjunctivitis and that the symptoms referable to the mucous membrane of the nose, asthma, etc., set in later. This premonitory symptom may precede the final outbreak by a fortnight, and perhaps disappear with a change of weather. Upon this observation he builds his therapeutic plan. Since the first phenomena of hay fever manifest themselves in the eye, it is probable that

the cause of the hay fever first attacks the conjunctiva; that under favourable circumstances (heat) it multiplies there; and that it then diffuses itself over the mucous membrane of the respiratory organs, perhaps through the medium of the lacrimal canal. The condition must therefore be attacked by local treatment, directed to the eyes at the earliest possible date. Dr. Genth chose instillation and bathing of the conjunctiva with sublimate solution, of the strength of 1 in 3,000. The bathing began fourteen days before the appearance of the hay fever, whenever the patient returned home after open-air exercise. He was besides required to keep as cool as possible, and to wear pale blue spectacles. The result of the treatment was that he remained free from his trouble for a length of time. At the end of June slight irritation of the conjunctiva reappeared, which however, could not be compared in intensity with former attacks, and involved no complication. The bathing had not been preformed with sufficient energy. Although the sublimate solution came in contact with the mucous membranes of the nose or throat but slightly, or perhaps not at all, neither of these organs was attacked, which must have happened if the virus of the hay fever passed into the body through the nose and mouth. In such an exceptional case, it would be simple enough to apply the solution by a nose douche, by garglings, or perhaps even by cautious inhalation.—*Br. Med. Jour.*

Antipyrin in Nocturnal Emissions.—According to the Vienna correspondent of the *British Medical Journal*, Dr. Thör, of Bucharest, has given some particulars as to the effect of antipyrin in cases of nocturnal emissions. Lupulin and camphor have been abandoned in such cases. Curschmann states that the sedative effect of lupulin on the genital organs, in spite of all recommendations, was not proved. As to camphor, it has, according to his opinion, no better effect. Fürbringer *(Krankheiten der Harn-und Geschlechtsorgane)* is of the same opinion. Zeissl still recommends it, as do Purgsz and other writers. The effect of nux vomica, arsenic, and atropine is also often uncertain. Among all the remedies hitherto employed, bromide of potassium or bromide of sodium was the most useful. Diday recommends it to the exclusion of every other drug. Bromide of potassium, from two to five grammes in a glass of water, taken just before going to bed, will, according to his experience, exert a prompt effect and check the pollutions. The prolonged use of the preparations of bromide, however, as is well known, produced an acne-like eruption, and the use of the remedy had, for this reason, often to be discontinued. Dr. Thör states that he has found antipyrin an excellent substitute for the bromides. He gives it in doses of from eight to fifteen grains, to be taken by the patient a short time before going to bed. In seven cases it had proved very successful, and checked the pollutions. No disagreeable after-effects were observed. In "neuro-asthenia sexualis," in the sense of Beard, antipyrin could also be used with good results; but the dose had in these cases to be sometimes increased from fifteen to thirty grains a day.—*Med. Rec.*

How Often shall we Re-vaccinate?—This is a very difficult question to answer. Some authors hold that one good primary vaccination followed by one good re-vaccination after puberty, quite meets the necessity of the case, and that successive re-vaccinations are worse than useless. Dr. Seaton says: "We cannot draw from the local phenomena of re-vaccination any inferences whatever as to the state in which the re-vaccinated persons were, as to liability to small-pox. . . . Jenner showed that the natural cow-pox might be induced again and again in persons who, being protected against variola by their first attack of cow-pox, could not be variolated either by inoculation or by exposure, as well as that cow-pox might be made to take on those who had had small-pox." While this supports the view that one good re-vaccination would suffice for the time being, the very element of uncertainty proven by the statement of Jenner himself, raises a doubt as to the period over which this protection would remain active and real; for if we cannot draw any conclusions as to the condition of exposedness or non-exposedness to small-pox from the phenomena of re-vaccination, the only test left is that of an attack of small-pox; and while the percentage of deaths from this disease has been shown to be so low in the case of re-vaccinated persons, we may well infer that a periodical re-vaccination would result in a yet lower death-rate. At all events, it would be in the line of prudence to perform this operation thoroughly, say once in ten years. In this connection, it would be well if the State were to pass a law making vaccination and re-vaccination compulsory; requiring the first to be done at a certain age of the infant (say six months), and the latter every ten years thereafter, up to the age of fifty or sixty years, a record of such vaccinations and re-vaccinations to be filed for reference at the office of the repective boards of health.—Dr. Morgan, in the *Sacramento Med. Times.*

The Treatment of the Morphine Habit.—Most of the disturbances following the withdrawal of morphine appear to be due to inanition from impaired digestive activity, anorexia, vomiting, profuse diarrhœa and obstinate insomnia. If the digestive disorders are prevented or lessened, the danger of the withdrawal of the drug is removed. From personal observation, Kaczorowski (*Medycyna*, 1887, Nos. 28 and 29) recommends the following: After the sudden withdrawal of mor-

phine, opium is to be administered: Tinct. opii, 30 parts; tinct. iodi, 2 parts; twenty drops to be taken every two hours, day and night. The opiate partially takes the place of the withdrawn morphine, and the iodine, as an antiferment, maintains the appetite and makes possible normal and efficient digestion; vomiting and diarrhœa are rare; the symptoms of deprivation are mild and harmless. The dose is gradually reduced to nothing, and the cure is soon complete. Confinement is not necessary, as the compulsory cure thus forciby effected is not permanent. Constant observation is indispensable, but the psychical influence is not less important. Well-conducted hospitals are best adapted to carry out the treatment, especially in the hands of a patient and reliable female nurse. To prevent the diffusion of the morphine habit. it is necessary that physicians personally make any necessary hypodermatic injections, and that they abstain therefrom in their own persons.—*Centralbl. für klin. Medizin.—Med. News.*

JABORANDI IN LABOR.—Having for years noted the fact that parturition does not progress favorably till *diaphoresis* occurs, I have for some months past induced this condition, in the early stage of labor, by giving fl. ext. jaborandi (*green*—the brown has proved worthless in my hands). When called to a case, I order a warm brick to be applied to the feet—which are always cold, and then to give one-third of a teaspoonful of fl. ext. jaborandi in half a wine-glassful of water, and repeat the dose every half hour until perspiration occurs. It is very seldom that more than two doses are required. The first effect of this medicine on the patient is soothing, she becomes more quiet, and bears her pain with resignation. Upon being questioned the patient often states that her pains do not hurt her as they did. On examination, after diaphoresis occurs, the os will be found dilating rapidly; the soft parts to be in a favorable condition; and in a short time the labor will be satisfactorily terminated. Should the patient appear weak from the sweating, I wipe her face and neck with a dry towel, and give her a teaspoonful of whiskey, or half as much of aromatic spirits of ammonia. Since using the above remedy, I have no occasion to use ether, chloroform, or the forceps.—*Med. and Surg. Rep.*

THE TREATMENT OF TONSILLITIS BY SALICYLATE OF SODIUM.—Mr. Charles Graham (in the *Practitioner*, May, 1888) confirms the testimony of Mr. Hillaby, already given to the readers of the *Gazette*, as to the value of salicylate of sodium in the treatment of tonsillitis. Mr. Grabham states that he has treated more than one hundred cases of it, and in the great majority speedy resolution has taken place; in most of these cases which went on to suppuration, the remedy had either not been given early enough or the doses not large enough or given with sufficient frequency. In incipient cases, especially those occurring in gouty or rheumatic persons, the drug acts like a charm. He gives to an adult from 10 to 20 grains every two hours, or 10 grains every hour until relief is afforded, and then the dose is gradually reduced. All astringent gargles are avoided and the patient directed to use hot milk, or, when the breath is very fetid, warm gargles of permanganate of potassium or hyposulphite of sodium. In cases where the patient has had several attacks of the disease small doses do no good at all, and even larger ones sometimes fail. Mr. Graham likewise states that bicarbonate of sodium, in doses of from 10 to 20 grains every two or three hours, appears equal to the salicylate of sodium in subduing the inflammatory action and preventing suppuration, besides being free from the tendency of salicylate of sodium to produce tinnitus, vertigo and deafness.—*Therap. Gaz.*

THE PREVENTION OF PUERPERAL FEVER.—Dr. Goodell writes to the *Medical Standard*, that he succeeded at the Preston Retreat in stamping out puerperal fever from its wards by the following procedure: Previous to the birth of a child the vagina was cleansed by a quart of (1 to 2000) mercury bichloride solution. After complete delivery the vagina was again cleansed in the same way. A suppository containing twenty grains of iodoform was slipped into the vagina. A pad of sublimated cotton kept in place by a T bandage, covered the vulva. His hands and those of his assistant were carefully cleansed by soap, warm water and the nail brush and dipped into a (1 to 1000) sublimate solution before each examination. After the introduction of this plan into the Retreat, not only did puerperal fever cease to appear, but ophthalmia neonatorum vanished. Every year, he says, he is called in consultation to see about a dozen women die from puerperal fever, whose lives, he is sure, might have been saved had the foregoing treatment been adopted.—*Med. News.*

REMEDY FOR COCCYODYNIA AND PRURITUS ANI.—I have, for reasons I do not now care to speak of, regarded this disease as purely neurotic. I have treated it with the Faradic current. One treatment produces immediate relief; a few treatments cure it. Three cells are sufficient; time, five minutes; the frequency of application depends upon the return of pain. The anode is placed over the sacrum and the cathode in the vagina or rectum, or over the sphincter ani muscle. This treatment, so far as I know, is original with myself.

Much has been written of late concerning the treatment of pruritus ani. I desire to add my own suggestion. The best remedy I have ever

found is the galvanic current; the quantity required need not exceed five milliampères; the time of application, five minutes. The relief is immediate, and the application, once or twice daily, is quickly curative. The anode is placed over the perineum, or base of the scrotum, and the cathode against the spincter ani, or, if required, within its grasp, bringing all the pruritic surfaces between the poles. I claim to be the first, so far as I know, to suggest this remedy for the treatment of this disease. I will, ere long, have more to say of it. —*Med. and Surg. Rep.*

GLYCERIN SUPPOSITORIES FOR HABITUAL CONSTIPATION.—Boas, in the *Deutsche medizin. Wochenschr.*, states that in a large number of cases he has had good results from the use of glycerin enemata as a purgative; but in some cases, particularly those with hemorrhoids, or in the individuals with an irritable rectal mucous membrane, which readily bleeds, the use of the syringe is no slight objection, so that the injections must be intermitted or entirely refrained from. The use of the syringe is also inconvenient. For these reasons he has had prepared suppositories consisting of capsules containing 16 minims of pure glycerin, which has been used in twenty cases, with the best results. The suppositories have been found to retain their form and efficacy for many weeks. Fifteen to twenty minutes after using one there is a desire to go to stool, but without tenesmus or other discomfort; soon followed, as a rule, by a copious evacuation. The employment of glycerin per rectum seems specially indicated when, with the constipation, there exists gastic disorder.—*Med. Prog.*

OXIDE OF ZINC IN INFANTILE DIARRHŒA.—M. Dupré stated at the Société Médicale de Reims that oxide of zinc is by far the most effectual remedy in infantile diarrhœa. It should be prepared as follows:

℞.—Sublimized oxide of zinc,	. .	gr. 55
Bicarbonate of soda,	. . .	gr. 25
Tincture of krameria,	. . .	20 drops.
Plain syrup,	. . . . .	30 "

A teaspoonful of this preparation is given every half hour until vomiting and diarrhœa have ceased. The first teaspoonful stops the vomiting, and the third or fourth the diarrhœa. In the few cases in which this treatment fails in entirely checking the disease, it gives great relief and prevents complications. From 1884, two hundred and thirty-four cases, all of which occurred during the months of July, August, and September, were treated by oxide of zinc, and among these only eight deaths were registered, the death-rate being thus only 4.7 per 100.—*Br. Med. Jour.*

TUBERCULOSIS (Luton).—

1. ℞—Neutral acetate of copper, . . gr. ⅛.
   Crystallized phosphate of soda, gr. ⅛.
   Powdered licorice,
   Glycerin, ... āā q. s.
   To make one pill.

2. ℞—Neutral acetate of copper, . . gr. ⅛.
   Crystallized phosphate of soda, gr. 8.
   Mucilage,
   Water, ... āā ℥ 2.
   Sig.—One tablespoonful three times a day.
   —*Revue Générale de Clinique.*

CEREBRAL ANÆMIA. — (Dujardin-Beaumetz). — 1. After eating, take a teaspoonful of iodide of iron in weak mineral water. 2. In the evening, take a large tablespoonful of the following solution:

℞—Bromide of potassium, . . .	grs. 150.
Bromide of sodium, ...	grs. 150.
Bromide of ammonium, . .	grs. 150.
Distilled water, ...	℥ 11.

3. Take every week two sulphur baths, and. if the season permits, a cold douche, followed by a hot douche on the feet.—*Gaz. Méd. de Nantes.*

PROFUSE PURULENT EXPECTORATION.—

℞—Ammoniac, ...	grs. 112½.
Aceti. scillæ, ...	grs. 225.
Aquæ fœniculi fl, . . .	℥ 6.
Ext. glycyrrhizæ pur., .	grs. 150.—M.

Sig.—Teaspoonful every half hour.
—*Med. Brief.*

PATHOGENY OF PARALYSIS AGITANS.—Many arguments in favor of the view that paralysis agitans is really an organic disease of the spinal cord are adduced by M. Teissier in the *Lyon Medical*, No. 28. Jacqoud maintained that the muscular tone derived from the nervous energy of the spinal cord was lost, while Grasset held a hypothesis, not easily understood, based on the assumption of a want of power of sustaining a fixed position. A diffuse sclerosis of the lateral columns has been found, in some cases extending up to the vesicular column of Clarke, and into the intermedio-lateral tract. One case of spinal pachymeningitis during life showed characteristic tremors, retropulsion, and psychic troubles. In this instance, fibrous invasions from the thickened meninges were detected here and there in the white columns of the spinal cord. The main conclusion to be drawn, if M. Teissier's observations are exact, seems to be that paralysis agitans is, like chorea, a symptom, and not a disease in itself.—*Lancet.*

PAINLESS DESTRUCTION OF NÆVI.—A. B., aged two years, suffering from a nævus the size of a

shilling, behind the right ear, was, on May 13th, 1887, treated in the following manner for its removal. Having first painted the healthy skin around the circumference of the nævus, for about half an inch, with a coating of collodion flexile, a thick layer of a four per cent. solution of corrosive sublimate was applied on collodion over the nævus. On the twenty-fifth, when the collodion was removed, the nævus had entirely disappeared, and nothing remained but a small scab. Dr. Boing was the first to suggest this method of treatment, and my object in publishing this case is to draw attention to so simple, satisfactory and painless a method of treatment.—*Brit. Med. Jour.*

LEAD AND LEAD POISONING.—The soluble lead salts when applied to raw or abraded surfaces combine with the albumen and cover the part with an impenetrable coating, which serves to exclude the air and promote healing. They also constringe the bloodvessels and act as sedatives, allaying inflammation. The lead salts are essentially unirritating and never excite congestion. Lead may be absorbed by the skin in sufficient quantity to produce the constitutional symptoms of the drug. Lead salts act as astringents to the mucous membrane of the mouth, and are partly converted into albuminates. In the stomach the same process is continued, but large doses act as irritants and excite vomiting. Probably most of the drug is absorbed by the mucous membrane of the stomach in the form of albuminate. Any portion which escapes absorption acts in the intestines as an astringent and is then converted into sulphide of lead, an insoluble and inert compound.

When lead is absorbed in small quantities for a length of time it produces a train of symptoms to which the term "plumbism" is applied. From the manifold uses of this metal, lead poisoning is a common occurrence. The modes in which it may be introduced in the system are as follows:

1. *Occupations.*—(*a*) *House painters* often suffer from lead poisoning from want of care in washing the hands before taking food. In grinding the carbonate, which is largely used as a basis for paints, the fine particles are often inhaled in sufficient quantity to produce lead poisoning. Sleeping in freshly painted rooms has been known to produce it.

(*b*) *Compositors* often suffer from handling the type, type-metal containing lead. (*c*) *Barmen* suffer from handling and cleaning pewter pots. (*d*) *Card players* suffer from the lead glaze on cards, especially if they moisten the fingers in the mouth in dealing.

2. *Articles of Drink.*—(*a*) *Water.*—Drinking water often becomes contaminated with the lead dissolved from lead pipes and the lining of cisterns. Pure water and water containing carbonate of lime, or sulphate of lime, has little or no action on lead. Carbonic acid indeed acts as a protective by covering the lead with a fine insoluble film of the corbonate Water containing much oxygen, nitrites, nitrates, chlorides, and especially organic matter, acts quickly on lead. Even a very small quantity—as little as 1-50 gr. in a gallon may suffice to produce lead poisoning. Water containing 1-20 gr. to the gallon should be rejected as unsafe.

(*b*) *Wine* is sometimes sweetened with acetate of lead, and has produced lead poisoning. Bottles are sometimes cleaned with shot, and if these are accidentally left in the bottle the wine may become contaminated. (*c*) *Spirits.*—Rum stored in leaden tanks on board ship has caused lead poisoning in sailors. (*d*) *Cider* made in glazed earthenware vessels may prove injurious. (*e*) *Lemonade* and *soda-water* may produce lead poisoning when patent syphon tops are used. (*f*) *Beer* is often contaminated by the lead pipes, and people who take the first glass in the morning are especially sufferers. (*g*) *Tea* packed in lead is equally liable to produce lead poisoning.

3. *Articles of Food.*—(*a*) Farinaceous foods wrapped in lead are unsafe. (*b*) *Pickles*, when the jars or bottles are capped with leaden tops, are very injurious. (*c*) *Loaf sugar* sometimes contains lead from the moulds in which the sugar is set, being painted with white lead, a portion being mechanically taken up. (*d*) *Snuff.*—Snuff may be adulterated with red lead, or may be unsafe from having been wrapped in leaden covers.

4. *Medicines.*—Lead given medicinally has been known to excite chronic lead poisoning, but it is of comparatively rare occurrence from this cause, and the acetate is often given in five-grain doses, three times a day for weeks, or even months, to check diarrhœa or hæmorrhage, without producing bad effects.

5. *Articles of Apparel.*—(*a*) Lead in the lining of hats has produced symptoms of lead poisoning. (*b*) Brussels lace is often whitened with preparation of lead.

6. *Hair Dyes and Cosmetics.*—(*a*) *Hair dyes* are a constant source of lead poisoning. (*b*) *Cosmetics* containing lead have proved injurious to actors, actresses, and professional beauties.

In some cases of well-marked lead poisoning the source of introduction of the poison may not be discovered even after the most careful investigation.

Symptoms.—(*a*) *Blue Line on the Gums.*—The blue line is observed at the edge of the gums where they join the teeth. It is one of the first symptoms to appear, and the slowest to disappear. It is always most marked opposite the incisors. It is absent when there are no teeth, and is most marked in people who fail to clean their teeth. Sometimes it extends to the whole of the gums, and even to the contiguous portions of the cheek. It is produced by the sulphuretted hydrogen de-

veloped from the tartar of the teeth, penetrating the gums and forming a black sulphide with the lead.

(*b*) *Colic. Lead Colic. Painter's Colic.*—This is a tearing pain, usually referred to the region of the umbilicus. The abdominal walls are retracted and rigid, and the pain is usually relieved by pressure, but not always. It is probably due to irregular contraction of the involuntary muscular tissue of the intestines. It is often accompanied by obstinate constipation and impairment of digestion.

(*c*) *Cramps.*—There are often cramps in the calves of the legs, sometimes in the penis and scrotum, or in woman in the uterus. There may be pain in the joints, especially of the extremities, often simulating rheumatism and aggravated by cold and wet weather.

(*d*) *Lead Paralysis or "Wrist Drop."*—Usually of the extensors of the forearm, especially those muscles supplied by the posterior interosseus branch of the musculospiral nerve. The supinator longus which is supplied by a branch of the musculospiral nerve before it divides into the posterior interosseus and the radial escapes. This affords a point of diagnosis between paralysis from lead poisoning and paralysis from disease of the musculospiral nerve. If this muscle is not paralyzed, it shows that the disease is not limited to the posterior interosseus nerve, and that the disease is probably not due to lead poisoning. The condition of the supinator longus is tested in this way: "Extend the paralyzed forearm on the table, with the radius upward, then press down the wrist, and tell the patient to rise it from the table. The supinator longus, if not paralyzed, becomes hard, contracted, and stands out firmly." In lead paralysis the muscles of the ball of the thumb waste, and in severe cases the deltoid and even the muscles of the neck and trunk are similary affected. General paralysis may occur. As a rule, there is only loss of motor power, but there may be loss of sensation. The muscles postmortem are found to be grayish-red in color, or whitish and tough, with considerable increase in the intersticial connective tissue. The origin of the disease is probably in the spinal cord, and is due to hyperæmia and proliferation of the neuroglia, with consequent contraction, causing degeneration of the cellular elements.

(*e*) *Abortion.*—Lead is a prolific cause of abortion, and women working in lead frequently suffer in this way. The father may cause abortion even when the woman is not a lead worker. (*f*) *Gout.*—Lead in people predisposed to this disease may produce an attack by checking the elimination of the urates from the blood by the kidneys.

Treatment of Chronic Lead Poisoning.—(*a*) Blue pill. Saline draught. (*b*) A mixture of sulphate of magnesia, sulphate of iron, dilute sulphuric acid, spirits of chloroform and peppermint water, three times a day for four days. Tincture of belladonna may be added if there is much colic. (*c*) A course of iodide of potassium to eliminate the drug. (*d*) Good diet, cod-liver oil, extract of malt, pancreatic emulsion, Parrish's chemical food, Fellows' syrup of hypophosphites. (*e*) Warm baths, Turkish baths, shampooing, massage. (*f*) Electricity, the faradic or continuous current being employed. (*g*) Hypodermic injections of strychnine.—From a lecture delivered by Dr. William Murrell at the Westminister Hospital, London.—*Med. Reg.*

WHAT A DOCTOR SHOULD CARRY WITH HIM.—We have received the following humorous letter from an esteemed subscriber in a northern New England State:

"I am a country practitioner, and thought I would ask your advice in regard to what you think necessary for a country doctor to carry with him when he goes to see a patient. When I first commenced practice, I carried but a small pair of pill-bags filled with what I then thought to be the essentials of medicine, having, of course, my lancet in my waistcoat pocket. I have been reading your valuable journal with interest, and as fast as I have become convinced of the necessity of using any article of medicine or instrument in my practice, have added it or them to my *armamentarium*. I now carry a medicine chest with a full assortment of medicines. I, of course, carry a stethoscope, as the unassisted ear is not considered quite modest in the examination of pregnant women. I am convinced of the propriety of having my obstetric forceps always within reach, and so carry them. Being frequently applied to to extract teeth, I must carry my tooth extracting instrument with me. As in some cases it is desirable to have the bowels moved as soon as practicable, and as syringes are rarely found in private families in the West, I carry two, one for adults and a smaller one for children.

"Being convinced from some articles published in your paper of the benefit of galvanism in certain cases, I carry a magnetic machine with me. I seldom use general blood-letting, but carry a patent cupping apparatus that it may be within reach when needed. My pocket-case of surgical instruments I carry in my medical chest, also my speculum, an assortment of pessaries and a vaginal syringe. I wish you would send me by return mail, three thermometers, one for the anus, one for the armpit, and one for the vagina; and if there is anything else you think necessary, should be obliged if you would indicate it. I formerly rode in a one-horse buggy, but have lately found it necessary to put two horses on, and have it in contemplation to trade my buggy for one with a large bed."

"RUSTIBUS, M.D."

[We sympathize with our country friend, but

he must keep up with "advance of science"; he can't expect to do business now-a-days with a lancet in one vest pocket and a paper of calomel and jalap in the other. We see he still absolutely needs a dozen or two indispensable articles, including a gynæcological chair and an operating table; but, as our terms are strictly cash in advance, we want to hear from him again.—ED.]—*Mass. Med. Jour.*

DEAFNESS TREATED BY PILOCARPINE.—Pilocarpine would appear, according to Corrado Corradi, to be very serviceable in the treatment of deafness, due to labyrinthine derangements, whether associated or not with disease of the middle ear. Large doses may be required. In one case two centigrammes of pilocarpine were injected twenty-four times. Moos has injected from five to eight drops of a 2 per cent. solution in cases of deafness resulting from diphtheria. Considerable improvement of hearing resulted even in cases in which deafness had existed for three weeks. Care is required lest the pilocarpine should increase the debility of post-diphtheritic cases.—*Lancet.*

RESORCIN IN CHRONIC ECZEMA —A favorable report is made (*Therap. Gaz.*) by M. Schmitz, of the treatment of two obstinate cases of chronic eczema by means of applications of resorcin. The remedy was employed as a solution in glycerin—a half ounce of the former to four ounces of the latter. The patients were young children, the disease chronic, and more or less general. The affected parts were painted twice daily with the above solution, improvement thereafter being steady and continuous.—*Am. Jour. Med. Sciences.*

RESORCIN IN CANCER.—Resorcin has been used with excellent results in the treatment of cancerous growths on the face, in the form of an ointment containing equal quantities of resorcin and vaseline. This mixture is applied first; an ointment containing 20 grammes of resorcin, and 30 grammes of vaseline is then applied. The ointment forms eschars on the surface of the growth. These eschars fall off when pure or iodoform vaseline is applied; fleshy granulations subsequently appear, and healthy cicatrization rapidly follows. —*Brit. Med. Jour.*

CANCER OF THE BLOOD.—It has often been maintained more or less explicitly that the blood, although a liquid, is to all intents and purposes a tissue. Proceeding upon this doctrine, M. Bard (*Lyon Médicale*) broaches the theory that leucocythæmia is in reality cancer of the blood, and explains the absence of a definite tumor by the obedience to the neoplasm law of the preservation of the essential attributes, including the liquid state, of its parent tissue.—*Lancet.*

PERTUSSIS.—Dr. Edward Wendt presents the following conclusions regarding pertussis:

1. There is constantly associated with whooping-cough a special microörganism, discovered by Afanasieff.

2. This microbe is a small bacillus, having properties that distinguish it from all other known bacteria.

3. The "bacillus pertussis" (*bacillus tussis convulsivæ Afanasieff*) can be readily demonstrated in the sputum of patients having the disease.

4. While its etiological significance appears established, it does not possess much diagnostic importance, since it is found only after the clinical features of the disease are already well marked.

5. The treatment of pertussis has not yet been materially advanced by this discovery.

6. Antiseptics locally applied do not appear to shorten the duration of the disease.

7. Hygiene and judicious alimentation are, in the present state of our knowledge, of, at least, equal importance with medicinal treatment.

8. Antipyrin and the bromides are reliable symptomatic drugs, and are devoid of danger.

9. A specific has not yet been found.

10. Abortive forms of pertussis may occur, but no plan of treatment now known can claim to have abortive efficacy.—*Med. Reg.*

A BEQUEST TO THE NEW YORK ACADEMY OF MEDICINE.—The will of the late Dr. Wesley M. Carpenter contains the following clauses:

"First. The sum of five thousand dollars to the New York Academy of Medicine, with which to found a lectureship, to be known as 'The Carpenter Lectureship.' This sum shall be paid to the trustees of said New York Academy of Medicine, who shall expend the interest thereon, annually, for one medical lecture. The lecturer shall be selected and the time at which the lecture shall be delivered shall be determined by a majority of the Council of the Academy, and the Academy shall publish the lecture in pamphlet form immediately after its delivery.

"If the Academy will not accept this gift and guarantee my executor that the above stipulations will be carried out faithfully, the proposed donation shall remain to be disposed of in my estate."—*New York Medical Journal.*

A MEDICAL COLLEGE IN KANSAS—There is talk of organizing a medical college at Topeka, in connection with the University of Kansas. The peculiarity of Kansas doctors just now, says one of them, is, that they do not propagate their species—they have no machine for manufacturing pure-bred Kansas doctors. Furthermore, we are told that Kansas doctors do not want such a machine, unless it is amply endowed by the State and made independent of students' fees.—*Medical Record.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

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AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

TORONTO, SEPTEMBER, 1888.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

NEWSPAPER PUFFS OF SURGICAL OPERATIONS.

The *Lancet* calls attention to a case reported, as follows: "It is of great importance that there should be no recurrence of such an event (a description in a lay paper of an operation for stone), and the editor of the paper in question only did his duty in inserting the apology of his reporter and will, we trust, in future take more care that the privacy of private practice and the modesty of professional feeling are duly respected. It will be a bad day for the profession, and not a good one for the public, when members of the profession allow themselves to be puffed by indiscreet friends." The Dr. here was not at all to blame, and received an apology from the writer of the report of the operation. The opinion thus expressed in the *Lancet* is slightly at variance with that of a local newspaper of this Province, which we subjoin. The paragraph is entitled "Mock Modesty," and reads:

"Among the unwritten laws of the medical profession is a rule that none of its members shall advertise in the newspapers. This is mock modesty. If a physician, as a healer of man's physical ailments, has confidence in his art, it is manifestly in the interests of sufferers that his skill be made known. How this shall best be done, whether by direct or indirect advertisement, is a question of business. Like the merchant's wares, the physician's art is for sale. Like the merchant, the physician hangs out a sign indicating his place of business; but the doctor, while glad to have his patients extol his skill, hesitates, on account of a musty tradition of his profession, to emulate the merchant, who has found direct announcement through the newspapers the best possible method of attracting the public custom, which, if he would be successful, the M.D., no less than the merchant, must needs win. To assume that because a licensed physician chooses to advertise he is an empiric, would be as unwarranted as the assumption that because through failure to advertise he gained no patients, he has no knowledge of the healing art. Some M.D.'s in our community are far too prudish."

Exhibition of ignorance is sad under any circumstances, but infinitely pitiable is the spectacle presented here. The writer knows nothing of the question he is attempting to settle, or rather which he has, to his own satisfaction settled; has perhaps no business to meddle with said question at all, and yet, lacking sufficient modesty to content himself with expressing an *opinion*, he takes the responsibility of dictating to the whole medical profession as to its ethics. There is such a thing as compound ignorance. A person is said to possess this compound article when, "he is ignorant and does not know it." There are some men who would not hesitate to criticize the work of Galileo, though unable to distinguish Orion in the heavens. These are the cranks agressive, a good example of which genus is found in the editor of an evening paper which lately electrified the world by stating that Boulanger was "in danger of suffocation by *hæmateria of the vocal cords.*" They are more objectionable than their brethren of negative qualities, who do not push their opinion unless asked, as was the case with the North Briton, who, when asked if he could play the violin, replied, "Nae doot I could, but I never tried."

TAX ON MEDICAL SUPPLIES.

The following from the *Medical Record* is well worthy of the careful perusal of the profession of this country. The medical profession is doing all in its power to check disease, and protect the health and lives of the public. Its members are expending their energies and their substance, in investigating the cause of disease, and the best methods of prevention and cure, and yet are made to pay through the nose for all instruments of precision with which to carry on such investigations, as well as for all necessary supplies to carry on

their daily work. The removal of the tax on such supplies should be agitated by the whole profession. "In a speech on tariff reform delivered by Hon. Ashbel P. Fitch, of New York, a letter was read from a New York pathologist, in which he said, among other things: 'For my microscope I sent to Jena, where are made the best instruments for my work. At the factory it cost $94; to get it out of the custom-house 40 per cent. more. Later I sent for an oil immersion lens, and paid $80 at the factory, 40 per cent more at the custom-house. Hermann Katsch, of Berlin, makes an instrument called a microtome, for cutting infinitely thin sections or shavings from the surface of a piece of an organ of the body, hardened in alcohol. Herr Katsch is the only man in the world who makes this particular variety of the instrument. To prepare a section thin enough for careful study under the high powers of the microscope this mechanism is necessary. To get this microtome from the custom-house I had to wait two weeks and pay a duty of 40 per cent. on its factory price.' The celebrated Dr. Koch, of Berlin, published a report of the cholera commission, conducted under the auspices of the Government. At most, twenty men in this country could require this work, and they must needs pay 25 per cent. duty to get it from the custom-house after paying its publisher's price and freight. What use could this report be to these scientists? To aid them in maturing methods of recognizing the disease when it appeared on shipboard in our harbors; to devise means to suppress it; to protect the country. It was to the expert work of one such scientist that the city of New York must give its gratitude, that a certain steamship just developing cholera among its steerage passengers was detained at quarantine and the city escaped overwhelming infection. For Koch's report he paid 25 per cent. duty, and never received anything from the city or Government. When we look up from our laboratory tables, microscopes, microtomes, and alcohol—taxed to suffocation—and read in the papers of the United States Treasury filled to suffocation, we reflect that our scientific work takes much time, brings no money return, increases our outgoes, and has not even the encouragement of the Government nor laity." We, in Canada, cannot, unfortunately, boast of an overflowing treasury, but in all other counts this argument tells strongly for us.

PHYSIOLOGICAL ALBUMINURIA.

The question as to whether albumen may not at times be found in the urine of perfectly healthy persons, has lately received a good deal of attention, and much careful observation has been directed to its settlement. Some competent observers have come to the conclusion that it is possible for such a condition of affairs to exist. Even if this be so, the name, physiological albuminuria, is certainly badly chosen. The whole idea seems essentially unscientific, as is well shown in the following extract from a letter to the *Lancet*, by Dr. George Johnson. He arranges cases of albuminuria connected with pregnancy thus:

1. Women known to be suffering from chronic Bright's disease may become pregnant, and some of them may pass through the different stages of pregnancy and parturition without serious complication.

2. In the advanced stages of pregnancy, especially in primiparæ, the urine sometimes becomes scanty and highly albuminous. With this there is more or less general œdema, headache, and not rarely convulsions. After delivery the urine soon becomes copious, and within two or three days it may be found quite free from albumen. In this class of cases the pressure of the gravid uterus on the vena cava affords the most probable explanation of the symptoms.

3. In a third class of cases the albuminuria may come on at an early period of pregnancy, and evidence of acute desquamative nephritis is afforded by the presence of epithelial and blood casts in the urine.

4. There is yet a fourth class of cases in which albuminuria appears for the first time *soon after delivery*, and is best explained by the theory of septic absorption from the interior of the uterus. In these cases, too, we find epithelial casts and other evidence of acute nephritis.

After referring to the absolute necessity of a correct understanding of the cause of the albuminuria, as regards prognosis and treatment, and stating that perfect recovery after acute desquamative nephritis is the rule rather than the exception, the writer goes on to say:

"I once more repeat my protest against the term 'physiological albuminuria.' The most delicate test finds no albumen in unquestionably normal urine; the term 'physiological' is, therefore, inappropriate and misleading. The fact that albuminuria may occur as a transient condition unattended by symptoms of disordered health, and

apart from evidence of structural changes in the kidney, does not make the condition physiological. We know that pulmonary hæmorrhage may occur unassociated with evidence of structural disease of the lungs and heart, yet no one would make light of a persistent or recurring hæmorrhage of this kind and speak of it as a 'physiological hæmoptysis.' Such a term, however, would not, in my opinion, be more inappropriate than the analogous expression, 'physiological albuminuria.'"

PROFESSIONAL DISTINCTION.

It has recently been urged by the *British Medical Journal*, and is now being advocated by many of our American contemporaries, that the physician, in addition to his generally fine appearance and courteous manner, ought to wear some badge or mark, whereby he can readily be distinguished from others. And it has been recommended that some uniform dress, or color upon the dress, be adopted to distinguish the doctor, the world over, and according to such regulators of medical deportment, the olive hue "shall be the badge of all our tribe." Well, olive is a good color, but in order to be effective the suggestion must be thoroughly carried out. Do not limit it to an olive button, nor an *olive* branch; let us dress in olive; let us wear an olive shirt, an olive collar and an olive tie; let us sleep in an olive nightshirt; let us die our hair and skin of an olive tint; and as many of the profession from long thinking on this subject have lost their hair, let them dye their bald pate of an olive hue. If one should require a horse let him choose one of olive color; use olive harness and paint his buggy olive. Now as the olive fruit varies much in tint in various parts, according to age and ripeness, so must our dress vary in accordance; thus the newly-fledged M.D. might have one leg of his trowsers, as far up as the knee, of olive; the one who is of five years' standing might have his trowser's leg olive as far as the waist band, and so on. So also might the specialist be designated by painting his particular specialty, of a very dark olive; thus the oculist could have one eye of a very deep olive; the rhinologist, his nose; the aurist, his ears; the gynæcologist could have a deeply tinted ovary painted in the palm of each hand. Then as the stamens of the olive are but two and the stigma bifid, so must the doctor be governed in this respect in accordance with the plan here prescribed, and limit his family to two. He might name his daughter *Olivia*, his son *Oliver*. Also in his walks about the street he might hum airs from the opera *Olivette*; when he meets his brother he should treat as usual, and the drink should be *olive oil*. If he be religiously inclined he shall each morning read the sermon delivered by our Lord on the *Mount of Olives*. We do not altogether approve of this sign; it would be a hard sign for the homœopaths, as the olive branch borne in the mouth of the dove was a sign that the waters of the earth were abating, and from a pretty extensive knowledge of the tendency to *apathy* among many of the profession, especially in the matter of remitting their subscriptions, we would be inclined to prefer the homely old Canadian thistle.

INFECTIOUS DISEASES SPREAD BY DOMESTIC ANIMALS.

The question of the spread of infectious diseases by domestic animals is one worthy the attention of our sanitarians especially, and to a very considerable degree, the profession generally. We remember reading not long ago of the ordinary barn-door fowl swallowing the sputal of a phthisical patient, who was in the habit of going to the door to cough. The fowls apparently soon learned to recognize the sound of the cough as a call to food, and would run and pick up the expectorated matter. The result of such feeding might be easily shown to be dangerous to other persons using the fowls for food. Chicken diphtheria is well recognized, but just what relation exists between it and the disease of man is not yet, so far as we know, specifically made out. Dr. Renshaw *(Br. Med. Jour.)* succeeded in inoculating cats with diphtheria from the human subject, and it has been shown by various observers that this disease is not uncommon in other domestic animals. The possible spread of this scourge by means of cats is well illustrated by the following case, given by Dr. Bruce Low in the *Sanitary Rec.*:

"A little boy was taken ill with what turned out ultimately to be fatal diphtheria. On the first day of his illness he was sick, and the cat, which was in the room at the time, licked the vomit on the floor. In a few days (the child meanwhile having died) the animal was noticed to be ill, and her sufferings being so severe and so

similar to those of the dead boy, the owner destroyed her. During the early part of its illness this cat had been let out in the back yard as usual. A few days later, the cat of a neighbor who lived a few doors further off was noticed to be ill. It had also been let out in the back yard at night. This second animal, which, however, recovered, was the pet and playfellow of four little girls, who, grieved at the illness of their favorite, nursed it with great care. All four girls developed diphtheria, their mother being convinced that they got it from the cat; and, indeed, no other known source of contact with infection could be discovered. It is easy to imagine cats catching an infectious illness like diphtheria, when we remember how often milk and other unused food from the sick-room is given to the cat, or by some people thrown out in the back yard for the benefit of the neighbors' cats, if they have none of their own. It is a frequent occurrence to see children carrying cats in their arms and even kissing them. It is obvious that if the cats were ill with diphtheria the children under such circumstances would almost inevitably contract the disease."

SALICYLATE OF SODIUM IN POLYURIA.—Dr. Randall reports *(Med. News)* an interesting case of recovery from this disease under the administration of the above drug. The patient was a girl of eleven years, "big for her age, but pale, flabby, and complaining much of cold hands and feet, who had been obliged for weeks to rise repeatedly during the night to void her urine, which was found to measure nine and a half pints in twenty-four hours, and to contain no sugar. Valerian, ergot, and tannic acid were given in succession, or combination, but they did no good. The thirst was difficult to appease, the quantity of urine was as great as before, and the child was weaker and further reduced in weight to seventy-nine pounds. The patient was now given eight grains of salicylate of sodium in aqueous solution after each meal. In ten days there was an appreciable amendment: she had more appetite, she felt stronger. The treatment from this time forward consisted of nothing else than the salicylate of sodium; no restriction being imposed upon the diet. The amount of urine diminished slowly and steadily, until, in November, the daily discharge was two and a half pints. Her color returned; there was no longer complaint of lassitude and of inability to breathe easily. The weight increased to eighty-seven pounds, and recovery became complete."

ALIMENTARY FOR GOUTY PATIENTS.—Just what to order and what to interdict in the way of food to gouty patients is often a matter of worry to the physician in charge. The following is by Dujardin Beaumetz in *Rev. Internationale des Sci. Med.*: — Gouty patients may eat all kinds of meat, especially white meats. Use in moderation, eggs, fish, mollusks, crustaceans, and fatty foods. Vegetables should constitute a large part of their diet, excepting gooseberries and spinach, which contain large proportions of oxalic acid. Use with care, nourishing nitrogenous vegetables, such as cabbage and cauliflower; starchy grains, such as peas, and beans. For bread, potatoes should be substituted. Fruits are all admissible, and raisins may mitigate the condition of the feet. As a beverage, water, and particularly water which is slightly alkaline, to dilute light Bordeaux wines and slightly alcoholic white wines. No champagne, gaseous water, strong beer, or alcoholic beverages are allowed. Coffee should should be drunk very weak. No tea is allowed, as it contains a large proportion of oxalic acid. The bowels should be kept in proper condition by the use of mineral purgatives. Lotions of the body, massage, and exercise in all forms are advised.

IODOFORM AND TUBERCLES. — The idea that phthisis is curable by iodoform has never taken a great hold upon the profession, but the question of its specific utility in that disease may now be considered set at rest. The *Lancet* says that "iodoform, though an excellent antiseptic and bactericide for some purposes, is, according to Rovsing, of Copenhagen, useless as a destructive agent of tubercle bacilli. He has found that the growth of tubercle is in no way retarded by the presence of a very considerable quantity of iodoform. He has more than once inoculated the two eyes of a rabbit with pure and iodoformed tubercle respectively, and has invariably found that the morbid process was communicated to the eye containing the iodoformed tubercle some time before the other was affected, the irritation produced by the iodoform in the tissues appearing to cause them to form a more suitable soil for the development of tubercle than those of the other eye, which were not similarly exposed to irritation."

NEW WAY OF PRESERVING THE DEAD.—The Philadelphia *Ledger*, says: "A Pittsburg physi-

cian, named Cooper, has just applied for a patent on a process to preserve human bodies by compression. By a curious combination of steel presses and hot rollers, he excludes all the moisture and reduces a full grown body to a very small size, 12 by 15 inches, rendering it as hard and imperishable as marble. He has made several experiments with perfect success. The doctor and others who have investigated the process think it will supersede cremation, as bodies thus preserved are not only not offensive, but can be made to assume various ornamental shapes and be kept in the parlor or elsewhere as constant reminders of the departed. The doctor has on his centre-table the remains of a child pressed into the form of a cross. It resembles the purest marble, is highly ornamental, and is perfectly odorless. The inventor proposes to place a large number of specimens on exhibition in a few days. A company will be formed to push the invention."

Relation between Erysipelas and Puerperal Fever.—M. Doyen *(Rev. Med.)* said he had investigated the report showing a connection between erysipelas and puerperal fever. From this investigation of clinical and experimental facts he draws the following conclusions:

1. The puerperal streptococcus, which is the microbe characteristic of puerperal fever, nearly always gives rabbits erysipelas and a small abscess; in a woman it sometimes produces erysipelas, cellulitis, or purulent pleurisy. 2. The streptococcus of erysipelas nearly always gives rabbits erysipelas, and at times even cellulitis, or peritonitis to man. 3. The streptococcus of pus at times gives erysipelas to rabbits. The three streptococci, which are identical in cultures appear to be one, of which the manifestations may vary. Doyen has never seen the streptococcus in his studies of the microbes of the vagina, and he believes that this microbe, when it is met with in the cavity of the uterus, has been imported there directly by the hands or the instruments of the operator.

To Remove Warts, Corns, etc.—The *Albany Medical Annals* says: The thickened epidermis is slightly moistened with an antiseptic solution (boracic or salicylic acid) and then covered with a fairly thick layer of pure crystallized salicylic acid. Over this is placed moist borated lint in four layers, a piece of gutta-percha fabric, and a bandage. In the case of small warts and callosities the dressing is allowed to remain for five days. On removal it will be found that the thickened tissue is somewhat shrunken and has separated from the subjacent parts, which are covered with perfectly normal skin, presenting no traces of injury or bleeding. The author has never seen any caustic effects from this application on the surrounding and subjacent tissues. If the callosity is of any considerable thickness, as is often seen on the sole of the foot, the dressing should be left in place for ten days or renewed after five days. The great advantage of this application is that the effects of the salicylic acid are localized to the thickened area.

Geographical Distribution of Cancer.—Dr. Haviland, writing in the *Lancet* on the above subject, says:—"There is abundant evidence to show that cancer does not thrive in high, dry localities, where the soil is kept sweet by the absence of floods and the nature of the rocks; but that it does prevail and become very fatal where vegetation is killed and decomposed, and where afterward a rank herbage springs up, composed of sour grass and bitter plants, which scour and otherwise disease cattle and sheep that feed upon them.

Ung. Hyd. Nit. in Boils and Felons—Boils and felons may be often aborted (*Wiener Therap. Gaz.*) by the free use of nitrate of mercury ointment, if suppuration have not commenced. It does not cause pain, but after about twelve hours, a drawing sensation is felt, after which all sensation ceases. The writer covers the entire finger with a coating of the ointment about $\frac{1}{8}$ inch thick and covers with strong sticking plaster. The dressing is allowed to remain on for six hours, after which no further treatment is necessary.

Substitute for Cod Liver Oil During the Summer.—Every one knows how difficult it is to keep patients up to the mark with their Cod Liver Oil in summer. The *Med. Press and Circular* recommends the following as a substitute—Chloride of sodium, ℥ij; bromide of sodium, ℥j.; iodide of potassium, ℥ss.; water, ℥iv. A teaspoonful morning and evening in milk.

Disinfection of Apartments.—It has been shown that the ordinary disinfection of rooms, *Deutsche Med. Woch*, by chlorine gas is inefficient, certain infectious organisms being uninjured by it.

The best method of disinfection, from the standpoint of efficiency, convenience, and cheapness, for bedding, clothing, and rooms of the sick, is steam of corrosive sublimate solution one per cent; walls and furniture should be washed with this solution, or one composed of equal parts of corrosive sublimate 1 to 100, and carbolic acid five per cent. Disinfection by this method does not expose a subsequent occupant of the room to danger.

ORCHITIS AND EPIDIDYMITIS. — Dr. Lowndes (*Lancet*) treats the above according to the method of Fourneaux Jordan, which consists in painting the testicle with a solution of nitrate of silver, two drachms to the ounce; at the same time strict rest is enforced. The pain is soon subdued, and the testicle returns to its normal size in a few days. Sometimes a second painting is necessary. Dr. Lowndes has treated 399 cases in this manner.

Rev. de Therap. gives the following simple treatment of *itch*:

℞—Animal fat. . . . 125 grammes;
Benzine . . . . . 30 "

Three or four frictions with the above ointment, followed by an alkaline bath.

The same authority gives the formula of Chauvin and Joriserine for *tuberculous hæmoptysis*:

℞—Iodoform, ... gr. ¾
Extract of gentian or of liquorice, q. s. M. ft. pil. S. Three to five pills per diem.

Or better:

℞—Iodoform, ... gr. ¾
Tannic acid, ... gr. 1½
Excipient, ... gr. 1½ M.

In an interesting work the authors form the following conclusion: Iodoform is a powerful and rapid hæmostatic remedy. Relapses are rare. Iodoform has relieved where ergot has failed.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION meets at St. Louis, September, 11, 12, 13. The programme includes many papers and discussions of importance. The first day will be given to the discussion of abdominal surgery, the second to infant feeding and some obstetric subject. The third day will be taken up with volunteer papers and some neurological subject. The society cordially invites all members of the profession to be present.

NEW DODGE IN ADVERTISING. — We take the following from the *Med. Record*:—

The following curious items appeared in the *Cincinnati Enquirer*, under the head of Births:

"FLAMIN—Saturday, the 9th inst., at 8:15 a. m., to the wife of D. W. Flamin, of College Hill, a ten-pound boy. Thanks to Dr. Wallingford, of Cincinnati.

"GALLION—June 5th, to Mrs. Nona Gallion, of Liberty Street, a nine-pound girl. Thanks to Dr. Wallingford."

One would suppose that Messrs. Flamin and Gallion would claim some thanks.

GENERAL ANTIDOTE FOR POISONS.—The following is given by the *Am. Jour. of Pharmacy* as a general formula:—Equal parts of calcined magnesia, wood charcoal, and hydrated oxide of iron, with a sufficient quantity of water. It is, as a harmless and simple remedy, applicable in such cases when the nature of the poison is unknown. As an antidote for iodoform, Behring recommends a twenty per cent. solution of bicarbonate of sodium.

THE ÆTIOLOGY OF AORTIC ANEURISM.—Karl Malmsten (*Berlin. Klin. Woch.*) has collected information regarding all the casee of the above affection occurring in Sweden during the last fifty years. His analysis goes to show that in 80 per cent. of all cases, the cause was syphilis, and in 20 per cent. senile degenerative change in the artery. Traumatism and microbic diseases thus appear rarely to lead to aortic aneurism.

ANTINEURALGIC FORMULA.—The *Pharm. Rec.* gives the following formula:

℞ Menthol . . . . . gr. xii.
Cocaine . . . . . gr. iv.
Chloral . . . . . gr. ii.
Vaseline . . . . . gr. lxxv.

M.—Ft. ung. Sig.—Apply to the painful parts and cover with muslin. It is said to be especially useful in periorpital pains and in ophthalmic hemicrania.

CARBUNCLE.—Mr. Quintin McLennan, of Glasgow, writes the *Br. Med. Jour.* that he is decidedly in favor of sulphide of calcium with carbo-

nate of iron, generous diet, and local cleanliness, with linseed meal poulticing as occasion demands, in the treatment of carbuncle. He thinks the method of resorting to the knife in every case is to be deprecated.

SCROFULOUS NECK AND ITS TREATMENT.—Dr. Gibb *(Glasgow Med. Jour.)* gives the following as his conclusions from his study of the above subject:

1. In scrofulous disease of the cervical glands, we have a tubercular process of a mild type, seldom leading to generalized infection, but perhaps occasionally doing so; frequently concerned in predisposing to, or even directly occasioning phthisis pulmonalis; and in the majority of cases, deteriorating the general health.

2. Tubercular disease of the cervical glands is too often allowed to go on to a disastrous extent without any active steps being taken to arrest its course, largely from a prevalent, indifferent and helpless feeling on the part of the medical profession.

3. Slight cases, being, of course, offered every possible advantage in the matter of constitutional treatment, should be carefully watched, and if, after the lapse of months, or it may be a year or two, we find the disease spreading, it is wise to extirpate the affected glands while they are yet movable. In such cases the operation will be easy, and little or no deformity need result.

4. Surgical interference is demanded whenever a sinus, resulting from a degenerated gland, exists, whenever pus can be detected in connection with a gland, and whenever there are enlarged glands accessible to surgery in a patient in whom a caseous or suppurating gland has already been discovered.

CERVICAL LACERATIONS.—Dr. Emil Nœggerath formulates, even still more distinctly than before, his position regarding the lacerated cervix. He says:

1. Women with uterine disease conceive more easily if the cervix is lacerated than if it is intact. They abort less often in the first condition than in the second.

2. The position of the uterus is not influenced by cervical laceration.

3. The uterine axis is not lengthened by cervical laceration.

4. Erosions and ulcerations are equally frequent in lacerated and in intact cervices.

5. Erosions of the lips are never the direct result of cervical laceration.

6. Disease of the tissues of the cervix are not more frequent in lacerated than in uninjured cervices.

7. Cervical tears have no influence on the development of uterine disease, either as to intensity or frequency.

In his concluding remarks he recommends that lacerations and tears be left alone.

CHRONIC DIARRHŒA.—M. C. L. writes as follows to the *Medical News:*

Many years ago I suffered severely from that trouble; I considered it incurable. Being in Paris, one of the best physicians there assured me it could be cured by a diet of racahout, and it was. Afterward here I found one could not get the acorn meal that forms the active part, but knowing that its usefulness must depend on the tannin it contains, I tried substituting it as follows:

Powdered chocolate, pure, .	½ lb.
Rice flour, ...	½ "
Powdered sugar, ...	½ "
Tannin, ...	¼ oz. (120 grs.)

The tannin, or the rest, separately, have little effect. Together they restore the tone of the alimentary canal and nourish as well as cure.

One thing is *essential*, that is long cooking, not less than half an hour. If simply boiled a few minutes, the harsh taste of tannin is very strong; with a good half hour's cooking, it disappears *wholly*—it is impossible to distinguish the medicine from ordinary broma. I think this has something to do with its curative powers and with the ease of digestion by the most irritable stomach. The remedy is too valuable not to be more widely known.

The amount to be taken is a teacupful morning and evening at meals.

NEW YORK TRAINING SCHOOL FOR MALE NURSES. Mr. D. O. Mills transferred, June 28th, a building erected at his expense, to the proper authorities. It will accommodate fifty pupils in training in connection with Bellevue Hospital, on the grounds of which it is situated. It will also be used as the pathological museum of that hospital.

A TRIBUTE TO SIR MORRELL MACKENZIE.—At a meeting of workingmen of Potsdam and Charlottenburg, says the *Med. Reg.*, held on Ascension Day, while they were enjoying an excursion, a resolution was adopted and forwarded to Dr. Mackenzie, thanking him for his loving devotion at the sick-bed of the Emperor, and assuring him that the value of his services could not be "diminished by any shameless persecution." Dr. Mackenzie was delighted with this tribute.

WASP'S NESTS.—The nests of these pests are said to take fire spontaneously. This may be due to the chemical action of the wax upon the material of which the nests are composed. This may account for the origin of fires in buildings and stacks which would be otherwise unaccountable.

FOR HEADACHE.—Stephen Mackenzie says that half grain doses of cannabis indica, morning and evening is the most efficient remedy he knows for persistent headache. Santonin in doses of ten grains two or three nights in succession is said to correct amenorrhœa.

MR. SAVORY has been elected for the fourth time as President of the College of Surgeons of England, with Messrs. Hulke and Heath, Vice-Presidents.

DR. G. STERLING RYERSON, of this city, has resumed his practice, after a three months' sojourn at some of the most noted hospitals of Europe.

Books and Pamphlets.

PTOMAINES AND LEUCOMAINES; or the Putrefactive and Physiological Alkaloids. By C. Vaughan, Ph.D., M.D., Professor of Hygiene, etc., in the University of Michigan; and Frederick G. Novy, M.S., Instructor in Physiological Chemistry in the University of Michigan. Philadelphia: Lea Brothers & Co. Toronto: W. J. Gage & Co. 1888. pp. 316.

The study of the basic substances formed during the putrefaction of organic substances, and those produced by normal changes in the tissues of the living organism, is of recent date. Little was known of this portion of the field of chemistry up till ten or fifteen years ago, so that a knowledge of such chemical processes is but rare, except among those whose avocation or specialty requires them to keep continually on the alert for new things in science. The number of investigators who have given their whole time and attention to this department of chemistry is large, and great progress has been made in it, and much light thrown upon physio-chemical processes occurring within and without the body, which have heretofore been considered problems in medical science. The writers of this book have carefully collected and arranged all the facts known concerning ptomaines and leucomaines up to the present year (1888). The book is very readable, and we bespeak for it a ready sale. To the physician, especially, it will carry light regarding the physiological alkaloids, while the surgeon will find concisely, yet comprehensively treated, in its pages all that is known concerning the putrefactive alkaloids. We heartily recommend the work to every practitioner, knowing that his money and time will be spent in acquiring a knowledge of what is contained in its pages.

A CLINICAL ATLAS OF VENEREAL AND SKIN DISEASES; including Diagnosis, Prognosis and Treatment. By Robert W. Taylor, A.M., M.D., Surgeon to the Charity Hospital, New York, etc., etc. Illustrated with one hundred and ninety-two figures, and fifty-eight colored plates; as also by numerous engravings through the text. Philadelphia: Lea Bros. & Co. Toronto: Carveth & Co. 1888.

We have received the first two parts of this work and have been highly pleased with both the plates and engravings, and the letter press. The work so far as published should prove invaluable as a guide to the practitioner. The diagnosis of the various diseases of the skin, which are the *bête noir* of nearly ever medical man, except the specialist, has been amplified and perfected. Aetiology has been thoroughly investigated, and treatment simplified. The work of the artist is deserving of all commendation, presenting the various forms and stages of the diseases under consideration with extreme fidelity. Numerous formulæ scattered through the text will be of great value to the general practitioner.

The work is to be completed in eight folio parts, containing 192 figures, 65 engravings and about 400 pages of text. It is sold by subscription only. Two parts to be issued every two months. Price, per part, $2,50.

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Original Communications.

ADDRESS ON SOME OF THE RECENT ADVANCES IN SURGERY.*

BY FRANCIS J. SHEPHERD, M.D.

Mr. President and Gentleman,—When informed by our worthy President that I was appointed to deliver the address on Surgery before this Association, I felt that the duty might have devolved on one much more competent of treating this great subject satisfactorily; one who had the faculty of making his address interesting to every one of you. When writing me, Dr. Graham said that the address should be limited to a period of —well, say that of an ordinary sermon, and hinted that the members of the Association did not want to be lectured to. I shall endeavor to the best of my ability to carry out these instructions.

It is not so many years ago that Boyer, after the French war, said that "Surgery seems to have attained the highest degree of perfection of which it is capable." The history of surgery, which during the past fifty years has been one of continuous advance, has proved the falsity of Boyer's opinion. During the last decade this advance has been almost phenomenal, and now scarcely a month passes without the introduction of some new operative procedure, or some daring operation in cavities and organs, which have from time immemorial been regarded as sacred. The causes of this advance have been two in number, the discovery of anæsthesia and the introduction of aseptic surgery, with which the name of Lister will ever be associated. Formerly, surgery was regarded as a mere mechanical art, and practitioners of medicine looked down upon the surgeon as one who practised a trade. How different is the relationship now. Surgery now takes the lead, and the surgeon has wrested from the physician many regions which he thought to be essentially his own. The abdomen, for a long time the hunting ground of the physician, has been almost completely surrendered to the surgeon, and with what brilliant results you all know. Certain diseases of the kidney, liver, ovaries, lungs, brain, etc., which were formerly purely medical, have become chiefly surgical; and owing to modern methods of operative treatment, many lives have been saved which heretofore the physicians let slip through their fingers as being beyond their skill to cure, though they endeavored by a copious, and it is to be hoped, judicious use of the various preparations in the pharmacopœia to alleviate the sufferings of their unfortunate patients. The brain, within the last few years, has yielded not a few results to surgery, which medicine has striven for in vain. The victorious advance of surgery has been positive, and the success which follows its onward course stimulates to further exertions. Still medicine and surgery are not opposed to one another, and should go hand in hand. Without the aid of the physician, many cases would escape the beneficent treatment of the surgeon; and one cannot afford to do without the other. In an address given by Prof. Bergmann before the German Scientific Medical Association in 1887, he says, "There is more or less rivalry between medicine and surgery in the cure of disease, but further progress in surgery can only take place through an increased knowledge of internal medicine. Surgeons must now avail themselves more of the accurate means of investigation which we owe to physicians; auscultation and percussion, thermometry, chemical, microscopical, and electrical investigation. As long as internal medicine remains the guardian of scientific methods and scientific principles, so long will it remain the parent tree of which surgery is only a branch." Again, "It follows from what has been said, that surgery owes all its recent development to clinical medicine, and just as antiseptic treatment is the product of careful observation in etiology, so the energetic procedures of internal surgery will have successful results only when firmly established by the methods of clinical medicine; otherwise surgery will sink, in the hands of

* Read before the Surgical Section of the Canadian Medical Association, at Ottawa, September 12th, 1888.

expert specialists, to a mere display of manual dexterity." Such are the opinions of one of Germany's greatest surgeons. His warning note that surgery may degenerate into a mere display of manual dexterity is timely, for what strikes me most in reading the surgical literature of the day, is that it treats almost entirely of surgery in its operative aspects, and those departments of surgery which are not operative seem to be treated with but scant consideration. There is great danger of the surgeon becoming too limited; already there are men who profess to perform but one or two operations; they certainly do them well, but such limitation must induce a narrowness of mind which is detrimental to surgery in general, and will in the end have a dwarfing effect on the more scientific branches of surgery. It is to be hoped that this is merely a temporary condition which is induced by the novelty of invading territories hitherto but little known to the surgical traveller.

However, even if it must be admitted that surgery to-day is chiefly operative, still it is more conservative than formerly, as witness the great advance made in the surgery of the joints. Where formerly a limb was amputated, now the joint is excised and the diseased matter removed with scissors and a sharp spoon. How rarely is the foot now amputated for disease of the articulations. I have only once amputated a foot for tuberculous disease of the joints, and have always regretted it. Who would now amputate an arm for disease of the elbow, or a hand for wrist joint disease?

But, gentlemen, I fear I am tiring you with my platitudes and generalizations, so I shall pass on and give in as brief a manner as possible, an account of the recent advances in some of the more important departments of surgery. At the Toronto meeting of the Association in 1882, it was my privilege to read the report on surgery. At that time, among other subjects, I discussed the modern treatment of wounds; since then, not much progress has been made in the treatment of wounds. The same principles laid down then are still in force—cleanliness, rest and asepticity. The dressings applied to wounds have become much simpler, and the antiseptics most relied on are soap, water, and a good nail brush. Not only should the hands of the operator be cleansed with soap and water, but the parts operated on and their vicinity should also be similarly treated. Faith in germicides is being lost, and although irrigation has supplanted the spray, the solutions used have become weaker and weaker, until some surgeons use water only, especially in operations on the abdomen and thorax, where antiseptics have been proved to be absolutely injurious and often dangerous.(a) Sponges have become objects of suspicion, their place is now taken by the irrigator, linen, or pieces of washed gauze. The spray, which formerly was a trusted friend, a valued ally, and with some the sheet-anchor of antiseptic surgery, has been all but abandoned, and is now seen as a mere survival of a past condition. Whilst in Germany last summer, I saw in every surgical klinik the magnificent ruins of the spray-producer, looking like some old castle which marked the customs and conditions of other days. Lister, himself, was one of the first to give it up, and last summer at King's College Hospital he spent some time in explaining to me how especially useless the spray was in those operations on the thorax and abdomen, where it is still retained in a sort of superstitious way by some enthusiastic men. Whilst on the subject of the treatment of wounds, I might allude to one point where it seems to me practitioners in reporting cases might be more explicit. We read of a successful case of abdominal or other operation where the result was, of course, a brilliant success (how few unsuccessful cases do we read of), and the author states that the operation was performed with full antiseptic precautions. Now, what does this mean? "Full antiseptic precautions," with one surgeon may mean an elaborate ritual, and with another simple cleanliness. It would be a great improvement if, when reporting cases of remarkable recoveries from astonishing operations, the reporter would state exactly the method of treatment employed to which he attributes his great success. The patient gets but little credit for the part he plays in bringing about a favorable result, and nature gets still less.

In the *surgery of the abdomen* much progress has been made. In ovariotomies and extirpations of the uterus the mortality after the operation is being steadily diminished, chiefly by the simplifi-

(a) See Senger's paper read at a recent meeting of the Berliner Medicinischer Gesellschaft.

cation of the methods of performing the operation. Rapidity of operation and a not too elaborate "*toilette* of the peritoneum," with drainage if there be bleeding, have been most successful in reducing the mortality in these operations. Following the lead of such men as Tait, Bantock, etc., antiseptic solutions are being discarded for plain water.

In cases of *acute intestinal obstruction* it is now becoming a recognized custom for the physician to call a surgeon in consultation, and the result has been that many lives have been saved. In my opinion these cases should be placed in the hands of the surgeon from the first, as in the great majority of cases there is little hope of relief being afforded by medical means alone. Not a few cases of *intussusception* have been cured by early operations, and also many cases of strangulation due to bands, twists, etc. It is now an axiom of surgery not to let any case of acute intestinal obstruction die without at least an exploratory incision. Some patients will be as anxious for operations in these cases as they are now in cases of strangulated hernia. Physicians still procrastinate in cases of intestinal obstruction. They often do not advise operation until all hope of recovery has been abandoned, and operation is looked upon as a *dernier ressort*. The treatment by rest, starvation and opium has still charms for most practitioners, who are always hoping that "something will turn up." Cases of operation are reported where no cause could be found for the obstruction, and where an opening was made in the distended bowel, with the best results. The artificial anus which ensued being, after some time, spontaneously closed. This affection, in spite of operation, will always be a very fatal one until some better means of diagnosis are available before collapse sets in. On many occasions the gravity of the case is overlooked until the patient is almost moribund.

In *inflammations of the cæcum and appendix*, surgical interference has been attended in numbers of cases by remarkable success. It is now held by many surgeons that all cases of so-called typhlitis ending in suppuration, are due to perforation of the cæcum (rare) or appendix, and that early operation in this most fatal affection is the proper procedure. In some cases the perforated bowel has been closed with sutures or the diseased appendix has been excised. The results have been most satisfactory. It has been attempted to close by operation perforations due to the ulcers in typhoid fever, with but little result; the condition of the patient and the state of the bowel itself, renders it improbable that much progress will be made in this direction. The operation has been performed by Kussmaul, of Strassburg, Bartleet, of Birmingham, and Morton, of Philadelphia, with fatal result in each case.

In *tubercular peritonitis*, most brilliant results have been effected by operation The early operations were chiefly cases of mistaken diagnosis for ovarian disease, or were doubtful cases in which an exploratory operation was called for; the good results following these mistakes led to the adoption of incision and drainage as a recognized treatment for this affection. Many remarkable cures are reported, but in the majority of cases this treatment is only palliative.

In *suppurative peritonitis*, the treatment by incision and drainage has also afforded some remarkable results, and in all cases this method should be adopted even if the cause, which is usually perforation of the intestines or appendix, cannot be discovered.

In *perforating gunshot wounds of the abdomen*, good results have been obtained by immediate operation. W. T. Ball and J. F. S. Dennis, of New York, on this side of the Atlantic, have led the way in showing the profession what excellent results may be obtained by immediate operation. Prof. Nicholas Senn, of Milwaukee, at the International Congress held last year in Washington, read a remarkable paper on "Intestinal Surgery." His experiments were made on dogs and he showed how gunshot wounds of the intestines could be healed by omental grafting, with or without scarification of the serous surfaces (*a*). Dr. Senn has also quite recently devised a method for the detection of perforating wounds of the intestines, by means of hydrogen gas insufflated per rectum, the escape of the gas from the abdominal wound can be recognized by its inflammability, and this, of course is proof positive that the intestine has been perforated.

At the meeting of the British Medical Association held in Dublin last year, some admirable papers on the *radical cure of hernia* were read by

(*a*) Meeting of American Medical Association, 1888.

such surgeons as MacEwan, of Glasgow, Mitchell Banks, of Liverpool, Ball, of Dublin, Barker, of London, etc. The results of operations by excision of sac and stitching up the wound, were most encouraging. MacEwan reported sixty-five cases operated on by his method, without a death, and only one failure. Banks, who was one of the first advocates of this method of operation, reported 106 cases. Ball, twenty-two cases without a death, and Barker thirty-five. MacEwan does not excise the sac, but after reducing the hernia makes use of the sac as a pad, by drawing it up through the internal ring and fixing it there. Banks, Barker, and others advise excision of the sac and fixing the stump at the internal ring, whilst Ball's method consists in torsion of the sac before excising. The open method has been advocated on this continent by McBurney, of New York. French surgeons, after ligature and excision of the sac, do not advocate closing the inguinal canal by sutures, as is done by English and German surgeons. My experience in this operation has been small, but some months ago I operated on a very formidable case, the details of which I shall venture to mention. A blacksmith, aged 52, had an enormous, irreducible, scrotal hernia of the left side, from which he had suffered for many years. The tumor had become so large that he could not wear trousers or follow his occupation. He was, besides, a rather corpulent man and a hard drinker. I performed the operation for radical cure of the hernia, on the 25th of April last. The sac was dissected out and opened, and the contents reduced with the greatest difficulty. The sac contained all the small intestines, the transverse and descending colon, and the sigmoid flexure, together with a large mass of omentum. Several pounds of the latter was excised, and it was only by suspending the patient by his heels (a suggestion of Dr. Bell's), that I was enabled to reduce the protruded bowel. The intestines had not been in the abdomen for some years, and that cavity now seemed too small to contain them; and when, after an hour and a half's exertion, the intestines were all returned, the abdomen was as tense as a drum. The sac was excised and the stump fixed to the internal ring according to Barker's method, and the canal closed by suturing the conjoined tendons to Poupart's ligament. The patient made an excellent and uninterrupted recovery, and is now pursuing his occupation as a blacksmith with comfort. I saw him a week ago, and there was not the slightest tendency to a return of the hernia.

In the victorious advance of surgery the *liver* has not escaped. Langenbeck, of Berlin, has successfully resected the greater part of the left lobe, and Dr. Dalton, of St. Louis, and Prof. Postempski, of Italy, have successfully sutured the liver for gunshot wound and stab wound respectively. Hydatid cysts have been frequently and successfully evacuated.

The *surgery of the gall bladder* has been making steady and uninterrupted progress. Lawson Tait has reported no less than thirty cases of operation on the gall bladder, with one death. He differs from Langenbeck, of Berlin, who prefers excision of the gall bladder to incision and drainage. Mr. Tait says, (*b*) "The more experience I have in dealing with these cases the less necessity, it seems to me, arises for anything more than the simple process of cholecystotomy, and the extremely favorable results obtained from it put it in the first rank of modern operative procedures." Diseases of the gall bladder are among those affections which should be looked upon as surgical, and which the judicious practitioner should treat as such. In some cases of obstruction from gall-stones, the gall bladder is shrunken and can be with difficulty brought to the surface. It is often difficult to say whether a case of obstruction of the common duct is due to impacted calculus or malignant disease; when the cystic duct alone is obstructed there is no jaundice. In doubtful cases an exploratory incision is now considered justifiable.

When the gall-stone has escaped from the common duct it may still prove a source of danger. Obstruction of the intestine due to gall stone is more common than is supposed, a small stone may cause symptoms of complete obstruction and consequent death. Such cases should be treated by early laparotomy. It is not necessary to incise the bowel to free the stone, for it may be passed in through the ileo-cæcal valve by external manipulation, as has been done by Mr. Clutton, of London, or broken up *in situ* with a needle, as recommended by Mr. Tait.

The *stomach* has been frequently successfully opened for the removal of foreign bodies, or the

(*b*) *Lancet*, April 14th, 1888.

performance of Toreta's operation of dilating a contracted pylorus; operations of excision of malignant growths of the stomach are not growing in favor, the game, as a rule, is not worth the candle. The *pancreas* has been successfully operated on for cystic disease, and the *spleen* has been so frequently successfully excised that the subject is no longer a matter for wonderment.

We come now to the *surgery of the kidney.* Since Simon first extirpated a kidney in 1869, great advances have been made. The surgery of no other abdominal organ has been so rapidly developed and perfected. No doubt many kidneys have been removed unnecessarily, and too often, unfortunately, with a fatal result; but surgeons are now beginning to see their way more clearly in this, until recently, little known branch of surgery. It is now a well established rule that no kidney should be removed without a previous nephrotomy, or exploratory incision. Again, no kidney should be removed until the condition of its fellow is ascertained. Several cases are on record where the surgeon has removed the only kidney in the patient's possession. A preliminary nephrotomy enables the surgeon to avoid this fatal mistake. The most brilliant results have been obtained in the operation of *nephro-lithotomy.* During the past year, Mr. Jordan Lloyd,(*a*) of Leeds, Eng., has introduced a method of exploration of the kidney which is a great improvement on the old needle puncture. He advises puncture of the lower end of the kidney with a long-bladed tenotome, in a direction upwards and inwards till the lowest of the calyces is reached; a small short-beaked child's bladder sound is then introduced, and the calyces and pelvis explored. In June last I had an opportunity of putting Mr. Lloyd's method into practice, and find it a simple and admirable one. The patient had been subject for several years to attacks of renal colic, latterly the pain had been continuous and was located in the left lumbar region and down the course of the ureter; great pain was felt on pressing over the left kidney. He had never had any blood or pus in his urine. Knowing the comparative harmlessness of the operation of nephrotomy, and having had experience in several other cases, I determined to cut down on the painful kidney and examine it. When the kidney was reached the exploration was made with the greatest facility and with but little disturbance of the parts After incising the lower end of the kidney with a bistoury, the short-beaked sound was introduced and the pelvis and calyces of the kidney thoroughly explored, but without result; no stone was found The hemorrhage from the kidney, which was free was easily controlled by pressure. The wound was closed and a drainage tube placed at its lower end Urine ceased to come from the wound after the second day. In ten days the patient was out on the gallery and in two weeks the wound had soundly healed. The pain which previously had been most intense was much relieved, and has since almost entirely disappeared. When last seen the patient was attending to his work and looked strong and healthy. I might mention that a woman from whom I removed a kidney in September, 1884, for calculous pyelitis, is still alive and in good health, and since the operation has given birth to three healthy children. Another operation which is finding favor in the eyes of surgeons is nephrorraphy or fixation of a floating kidney. Removal of the kidney was formerly practised for the relief of the pain and inconvenience of a floating kidney, the substitution of nephrorraphy for nephrectomy in these cases is a decided advance, for the former operation is a much safer as well as a more scientific one.

In the *surgery of the bladder* progress has also been made, though not to the same extent as in that of other abdominal organs. Tumors of the bladder are now successfully removed, and Guyon, of Paris, and Thompson, of London, have done excellent work in this direction. The introduction of the electro-endoscope has much facilitated diagnosis. The old supra-pubic operation is now the fashionable one for the removal of stone from the bladder, and it is being practised largely everywhere. The operation has been much improved by the introduction of Petersen's rectal bags and the practice of moderately distending the bladder before operation with an antiseptic solution. The operation is suitable for cases of large and hard stones, and for the removal of tumors and foreign bodies, but it will no more supplant the old operation of lateral lithotomy than did lithotrity. In some cases of stone in the bladder, Mr. Reginald Harrison, (*d*) of Liverpool, justly remarks, "it is necessary to do something more than merely re-

(*a*) *Practitioner*, Sept. 1887.

(*d*) Lettsonian Lectures, 1888.

move the stone. In cases of cystitis with enlarged prostate where stone has formed, removal of the stone is necessary, but it is also necessary to prevent further formation, by getting the bladder into better condition." The bladder, says Mr. Harrison, is like a chronic abscess with a stone in it, and it is quite as necessary to drain the one as the other." These cases are unfit either for supra-pubic lithotomy or lithotrity; but the lateral operation provides an excellent means not only for the removal of the stone but of after-drainage of the bladder. Ruptured bladders have recently been *successfully treated by abdominal section*, and suture of the bladder rent. An early diagnosis is of course important in these cases.

I fear I have already exceeded my allotted time, and although many other subjects of intense interest to the surgeon might be touched upon, yet I feel constrained, for the remainder of my address, to confine myself to giving a short account of the remarkable advance which has been made during the past two or three years in the treatment of various *diseases and injuries of the brain and spinal cord* by surgical operation. Brilliant results have been obtained in this department of surgery, results which, a few years ago, would have been looked upon as Utopian. The operation of trephining the skull is a very old one, and was frequently and often unnecessarily performed by surgeons in the early part of this century. I have heard, that it was quite the fashion for Dublin surgeons to have their pockets full of buttons of bone which had been removed with the trephine from the skulls of pugnacious Irishmen. However, the surgeons at that time only trephined for injury, and their explorations did not extend further than the dura mater; it was considered injudicious and dangerous to interfere with the brain itself, not, as in earlier times, for superstitious motives, but owing to such interference being followed by fatal inflammation. It is only with the introduction of antiseptic surgery, and a more accurate knowledge of the localization of brain functions that the brain itself has been interfered with. Our knowledge of the functions of the brain has been greatly extended by the researches of such men as Broca, Hughlings Jackson, Fritsch and Hitzig, Goltz, David Ferrier, Yeo and others. The observations of these investigators chiefly go to prove that many areas in the brain are connected with separate and distinct functions. It was found that if these areas in the surface of the convolutions were stimulated electrically, distinct movements were excited in certain groups of muscles on the opposite side of the body. These facts were not discovered all at once, but were the result of prolonged clinical observation and careful experiments on the brains of animals. Many cases of severe injury to the brain have been saved in the past by early trephining. Abscesses of the brain following injury have been frequently opened successfully. Again, many cases of epilepsy, due to injury, have been cured by trephining over the spot injured; but it is only quite recently, in fact only since the truth of the theory of Broca's localization has been established on a firm basis, that operations have been undertaken where there was no external indication of injury or disease. The lesions have not only been successfully diagnosed, but the brain and its membranes have been incised without resulting in fatal inflammation. It has been clearly shown that inflammatory conditions following operations are due to sepsis. If the wound be kept aseptic the case does well. Dr. MacEwen, of Glasgow, an old pupil and house-surgeon of Lister's, noticed that cases of severe injury to the skull with extensive loss of cerebral substance, were quite amenable to treatment, and exhibited no tendency to inflammatory action as long as the tissues were kept aseptic; hence, he said, if such injuries can be recovered from, how much more likely is recovery from a carefully planned operation. His first case was in 1876 for abscess, which he diagnosed to be in the vicinity of Broca's convolution; operation having been refused during life, he was permitted to trephine over Broca's convolution after death; the abscess was found as diagnosed and easily evacuated. In 1879 Dr. MacEwen successfully evacuated from beneath the dura mater of a boy, who had previously received an injury of the head, some fluid which had collected there and had given rise to convulsive seizure of arm and leg. In the same year a tumour of the brain was diagnosed and successfully removed from the frontal lobe of a woman, who lived for eight years after and then died of Bright's disease of the kidneys. Up to 1884 MacEwen had operated on seven brain cases, with one death, a case of abscess of the tempero-sphenoidal lobe. In December, 1884, the first case of tumour of the

brain was operated on in London, having been previously diagnosed by Dr. Hughes Bennet, and removed successfully by Mr. Rickman Godlee; the patient lived four weeks relieved of his previous symptoms, and then died from septic complications. The report of this case, at a meeting of the London Medico-Chirurgical Society in May, 1885, gave rise to a most interesting and important discussion, in which Drs. MacEwen and Ferrier took part. Dr. MacEwen related several cases in which he had successfully operated, and mentioned his method of re-implanting the removed disc of bone. Up to this time MacEwen had operated on seventeen cases for the relief of cerebral pressure and other brain lesions. At the Brighton meeting of the British Association, in 1886, Mr. Victor Horsley excited the admiration of the meeting by his remarkable paper on the *Advances in the surgery of the central nervous system.* In this paper he minutely detailed his method of operating, and showed how, if performed carefully, the brain might be incised and tumors removed without any great risk to the patient. His experience was chiefly derived from operations on monkeys. He also showed three patients on whom he had successfully operated—one for tumour, and two others for scarring of the convolutions, causing epileptiform fits. Since this time operations on the brain have become comparatively frequent for epilepsy following injury, for abscess of the brain (especially that form connected with suppurative disease of the ear), and for tumours. On this side of the Atlantic, Drs. Keen and Roberts, of Philadelphia, and Drs. Weir and Seguin, of New York, have done good work. Dr. Keen has recently successfully re-implanted, in one piece, the bone removed by the trephine.

At the second meeting of the British Medical Association, in Glasgow, Dr. MacEwen read an epoch-marking paper, in the surgery of the "Brain and Spinal Cord." He related, how for years, he had been working at this subject—and with what great results. His paper is certainly a wonderful contribution to surgical science. He says: "Of twenty-one cerebral cases (exclusive of fractures of the skull and other immediate effects of injury), in which operations have been performed by me, there have been three deaths and eighteen recoveries. Of those who died all were *in extremis* when operated upon. Two were for abscess of the brain, in one of which pus had already burst into the lateral ventricles; in the other suppurative thrombosis of the lateral sinus had previously led to pyæmia and septic pneumonia. The third case was one in which, besides a subdural cyst over one of the hemispheres, there was extensive softening at the seat of the cerebral contusion in the opposite hemisphere, accompanied by œdema of the brain. Of the eighteen who recovered, sixteen are still alive, in good health, and most are at work; leaving two, who have since died, one eight years after the operation, from Bright's disease, the other forty-seven days after operation from tubercular enteritis."

These results are certainly remarkable and very encouraging, as to the future of the surgery of the brain. I had the pleasure, last year, while in Glasgow, of seeing some of Dr. MacEwen's cases, and some were most interesting. In one case the diagnosis of the lesion was made from sensory phenomena alone, and successfully operated upon. Notwithstanding the success of such men as MacEwen, and Victor Horsley, operations on the brain should not be rashly undertaken. Each case should be studied on its own merits, and the surgeons who attempt these operations, need not only experience of general surgery, but an accurate knowledge of motor and sensory phenomena in connection with the localization of the functions of the brain.

Dr. MacEwen's name is also associated with the surgery of the spinal cord, he has operated on no less than six cases. In all, the posterior arches of the vertebræ were removed; four to relieve paraplegia, caused by pressure from connective tissue, neoplasms and displacement of the vertebræ, due to caries or traumatism. Out of the six cases operated on four were successful and two died. The first case was operated upon as early as 1882. Mr. Victor Horsley successfully removed a tumor, diagnosed by Dr. Gowers, from the posterier end of nerve opposite the third dorsal verterbra. The patient suffered from paraplegia. He completely recovered and was shown to the London Medico-Chirurgical Society, January 24th, 1888. I have frequently trephined the spine in the dead subject, and I can say that the operation itself presents no great difficulties. The cases which call for this operation are, however, rarely met with.

There are many other interesting subjects on

which it might be profitable to dwell, such as: intubations of the larynx, re-implantation of bone, transplantation of the eyeball and conjunctiva, new theories as to the cause of inflammation, tetanus, etc., surgery of bronchocele, surgery of lungs, joints and many others, but time will not allow me to more than mention them.

RARE CARDIAC MALFORMATION.

BY G. A. BINGHAM, M. D.,
Pathologist to Toronto General Hospital.

Albert C., æt. 4 years 11 months, convalescing from measles and running about the room, dropped in a fit and died after a few minutes, on the evening of June 30th.

About one week prior to this I had been called to see him and found an unusually stout lad distinctly cyanosed, breathing in an asthmatic manner, and whose rapid and violent heart-beats I was able to count *by sight*, even when he stood some distance away. Following was the history obtained: "Ever since he was three years old has been troubled with 'fits,' sometimes two in three weeks and sometimes once a fortnight. Before this time was a healthy boy, with no cyanosis and no heart trouble suspected.

No apparent cause for the attacks; they would come on even when he was perfectly quiet. He would cry out that he felt ill and would then fall suddenly; would remain sensible during the attack; would scream and fight for breath. The fits lasted from ten minutes to one hour.

Seven weeks ago had a fit during which he was perfectly insensible and stiff, with eyes open and foaming at the mouth, since that time he has appeared worse. Has only been in Canada three weeks. While in England (Birmingham), the hospital physicians had used him frequently as the subject of a clinic, and they had said that a certain opening in the heart had not closed as it should have done."

On examining the heart I found a perfect babel of sounds, but among them all I detected a systolic sound which I thought to be aortic obstructive.

His finger-nails and lips were blue-black and face and extremities mottled of the same color.

Dr. Richardson, jr., and myself were only allowed to make a very imperfect post-mortem examination, and on the morning of July 1st we hurriedly ligated the cardiac vessels and removed the heart, which was all we were permitted to examine.

The heart as a whole was hypertrophied, especially the right ventricle.

On opening the right auricle the foramen ovale was found to be closed, except a small valvular opening on one side. In the right ventricle the columnæ carnæ were enormously hypertrophied and there was no apparent opening into the pulmonary artery. On passing a probe down into the distal end of the pulmonary artery (which was normally patent) it was made to pass with some difficulty beneath the network of columnæ carnæ between which it was seen. There was then a decidedly limited pulmonary circulation from the right heart.

How then did the venous blood escape from the right ventricle? On examining the ventricle more closely, we were surprised to find up behind one of the semi-lunar valves, a large direct opening into the aorta; indeed the aorta appeared to take its origin equally from the right and left ventricles. On looking into the aorta from the distal end, the inter-ventricular wall was seen as a line forming the diameter of the cardiac orifice of the vessel.

Several questions naturally suggest themselves in connection with this case:

1. How was sufficient blood aeration carried on, to prolong life for nearly five years? Certainly not through the insignificant and almost imperceptible crevice between the columnæ carnæ in the right ventricle.

2. Why the hypertrophied right ventricle?

3. What was the cause of the systolic sound heard?

4. What is the pathology of the "fits"?

5. Why did the "fits" only begin about two years ago?

6. What was the cause of the cyanosis?

(1) Unfortunately we had not secured the aortic arch in our post-mortem excision of the heart, but there can be little doubt that the following was the condition present. A ductus arteriosus was given off as usual, from the pulmonary artery to the aorta; and this had remained patent; now when the venous blood from the right

heart passed into the aorta, a portion of it was forced into the d. arteriosus and from thence through the pulmonary artery into the lungs. Thus, by a reversed current, the work of aeration was carried on.

(2) The amount of extra work thrown upon the right ventricle, in forcing the current through the abnormal aortic opening and attempting to force it into the normal passage, would account for its hypertrophy.

(3) The systolic sound heard was undoubtedly pulmonary, obstructive at least in part.

(4) The attacks (in which he fought for breath) were probably due to a pulmonary stasis, caused by the temporary arrest of heart action, which always accompanied these attacks. The attack sevens week before death was evidently epileptoid in character and due in part to the excess of venous blood in the brain and the action of this impure blood on the nervous system.

(5) Why the child remained free from the attacks early in life I am not prepared to say. I believe that at an earlier period the pulmonary orifice in the right ventricle was very much more patent than at present. The orifice as now seen is occluded by hypertrophied columnæ carnæ and ventricular walls, and it may be readily understood, that if this hypertrophy were absent (as in earlier life) we would have a more patent artery. This may probably account for the non-appearance of the attacks before the third year of the child's age.

(6) Morgagni has said that in these cases the cyanosis is probably due to the general congestion which is present. Hunter, on the other hand, has claimed it to be the result of the admixture of venous with arterial blood, which is constantly going on. Probably both of these factors enter into the maintenance of that condition of peculiar discoloration, known as cyanosis.

CREOLIN AS AN ANTISEPTIC.—If creolin be as sure a germicide as the authorities now state, it must soon supersede the bichloride. It is harmless to the human organism; is cheap, and does corrode instruments. It is used in one-half to 3 per cent. solutions.

A CASE OF THROMBOSIS OF THE UTERO-VULVAR CAVAL RUPTURED DURING LABOUR.*

BY WM. S. MUIR, MD., L.R.C.P. AND S.ED., TRURO, N.S.

On the 22nd of March last, I was called to attend Mary C., aged 17 years, primipara, a short, stout, full-blooded girl. She had been in labour for four or five hours, as it was not the intention of her friends to have a doctor, her grandmother being a local midwife. I was told that her pains had been very hard and constant, that the waters had broken, but there had been no discharge of blood. Upon examination, I found things about as stated. The head was at the brim, and had been in the first or second position. I waited about for over an hour, and, as things did not appear to be any farther along, I decided to deliver her with forceps. I may say that during my wait I could not decide what was the cause of the delay, as the parts were natural and good-sized, and the head did not give one the idea that it was unnsually large. I chloroformed her, and had great difficulty in getting the left blade of the forceps introduced and in position. However, after some time, I got the forceps (Simpson's medium) locked. After giving a little more chloroform, I waited until I felt the uterus contract, then made gradual traction, using very little force. All at once came a gush of blood, which appeared to come from the upper part of the canal; it fairly poured out. My first thought was a ruptured uterus; then a ruptured vagina; but that could not be. The blood was not dark and in clots, but as thick as ordinary venous blood, and it coagulated at once in the vessel I put below the edge of the bed to catch it. I put my hand on the uterus above, and found it contracting from time to time. The hemorrhage still continued; not in gushes, but slowly and steadily. My patient's face and pulse now began to tell a tale, so I decided to send for my friend, Dr. Page, who lived near at hand. Dr. Page came at once, bringing stimulants with him. Before this I had removed my forceps and discontinued the chloroform. We decided to deliver her at once. I gave a small quantity of chloroform, and Dr. Page delivered her with his own forceps with very little difficulty.

* Read at the Annual Meeting of the N.S. Medical Society, 1888.

Following the delivery of the child, came a large quantity of mixed blood. We decided to deliver the placenta as quickly as possible, and this was done by Credé's method. After the delivery of the placenta, the hemmorrhage ceased. Effusion took place into the tissues, and the right side of the vagina, and right labia filled up as if a thrombus had occurred there. My patient hovered between life and death for some hours, but by the free use of stimulants, reaction set in, and after that she made a good recovery. I may say that I syringed her myself with carbolic acid, 1 to 70 for four or five days, and would advise all who have cases that require careful syringing to see it done, or what is better, do it themselves. Do not trust to a nurse, at any rate, not to a self-constituted country nurse, as in some cases it will only be half done. In other cases, too much force will be used, and shock probably produced. I have found one nurse who lied to me once every day for ten days, and my patient was never syringed at all, although she had been delivered of a putrid child.

That this was a case of thrombosis of the vagina, and that very high up, if not at the cervix itself, I have not the slightest doubt. This was also the opinion of Dr. Page.

Parvin calls it an accident, or injury, and gives as the causes, mental emotion, violent vomiting, and coughing. He also gives as a sure cause, a prolonged stay of the head in the pelvic cavity, as was the case in my patient; also that the walls of the vessels are thinned by the great pressure of the fœtus, and when the pressure ceases, a new wave of blood distending them, they give way. In most of the cases recorded, the thrombus was post-partum. Perrot gives it as such in 35 out of 43 cases. Dewees has given an instance when the thrombus formed ten minutes after the birth of the first of twins, and was ruptured by the descent of the second child. Parvin reports that Madam Sasanoff, of the Maternity of Kolonna, St. Petersburg, reported five cases, of which four were fatal. A thrombus may occur at the cervix uteri, the anterior lip being the most common seat for it, next to the orifice of the vulva. The dangers after obstruction to labour are, first, hemorrhage after rupture; second, which might be called a secondary danger, that of gangrene, or suppuration. There appears to be a great difference of opinion among authors as to the predisposition; Verrier giving as a fact that women having varicose veins and tumors are more frequently subject to thrombosis, whilst from Perrot's statistics, in forty-three cases, only two had any enlargement of the veins, and Barker states that no such condition precedes thrombosis. It is not a frequent accident, injury, or disease, as Deneux in 40 years saw but three cases. Dubois reports but three cases in 14,000 cases of confinement. Winckle gives the proportion as 1 to 1,600. The death rate in these cases appears to be large. Blot gives it as 5 in 19 cases, but, according to most authorities, it must be much greater. In conclusion, let me say that my case was one of thrombosis of the vagina, very high up, and at the right side; that I did not produce it by the introduction of the forceps, and that the cause was, as Parvin gives it, viz., the head being so long in the pelvic cavity.

Correspondence.

OUR NEW YORK LETTER.

From our Own Correspondent

NEW YORK, Sept. 26th.

The colleges are beginning to open for the fall sessions, and by the first of October about two thousand medical students will be at work in this city, preparing themselves to supply the demand for more doctors. Professional men who have been out of the city during the summer are mostly all returned, and things in the medical line are beginning to take on a lively appearance again. During this week the Congress of American Physicians and Surgeons is being held at Washington, and, judging from the papers to be read and the men who are present, it is expected to prove a success. The Congress is at present composed of eleven societies. These societies, which hold their meetings every year, meet every third year at Washington; this meeting of all the societies forming the Congress. Each member is a member of his own society, and of course has the interests of that society at heart primarily, and of the whole Congress secondarily. This is the first meeting of the Congress, and it remains to be seen if it proves to be more successful than the American Medical Association, whose organization is just the opposite, *i.e.*, the Association first, and the different sections second.

Dr. Fordyce Barker gave a dinner the other evening to several distinguished British surgeons, Sir Wm. McCormack, Mr. Arthur Durham, of St. Thomas' Hospital, and Mr. Reginald Harrison, of Liverpool, who are here as delegates to the Washington Congress. Another distinguished surgeon who has been here during the past few weeks is Dr. Esmarch.

Up to the present time there has been but one case of yellow fever reported in New York, that of Prof. Proctor, who came here from Florida and was taken sick on the day of his arrival—on a Saturday. On Tuesday he was removed to the Willard Parker Hospital for Contagious Diseases, where he died the following day. Yesterday afternoon I went through this hospital. It is under the control of the Board of Health, and is just recently built, being intended for diphtheria and scarlet fever. It is isolated from buildings around, and is a model hospital for contagious diseases. On the fourth storey is the laundry, etc. On the third are two wards for diphtheria, and on the second storey two scarlet fever wards. Off the wards are bath-rooms, nurses' rooms, etc. The diphtheria cases are taken to the ward by an elevator, and the scarlet fever up the stairs, so that the danger of contagion is reduced as much as possible. In fact, there is as complete isolation of the diphtheria cases from the scarlet fever, as if they were in separate buildings. Solid brick partitions throughout the building. There are twenty-seven beds for adults and sixty cots for children. The treatment for diphtheria is the old one of pot. chlor., iron, stimulants, whiskey, musk, camphor, etc. Locally, the nasal, post-nasal and faucial cavities are sprayed every half-hour with a 1-2000 to 1-4000 bichloride solution, according to age of child. Some of this is absorbed, so that they get some advantage of the bichloride internally, but it is the only way it is administered. In laryngeal diphtheria, or croup, practically the same treatment, with the addition that the steam spray is kept going. When there are signs of marked stenosis, retraction of the ribs and sternum, cyanosis, etc., and after having first tried emetics, steam inhalations, etc., and if the membrane be not coughed up, or the stenosis not relieved, intubation is done. Dr. Priest, the resident physician, has had forty-two cases in which he did intubation, and of this number twenty-six per cent recovered.

A surgical operation which is becoming more popular here, is that of supra-pubic cystotomy. During the past two months, the visiting surgeons to Mount Sinai Hospital have done—mostly private cases—fifteen of these operations, without a death. Dr. J. A. Wyeth has done the operation four times this summer, once for stone, once for foreign body, and twice for tumors; all recovered. Ages, from 32 to 68 years. His method of operating is: a Barnes' dilator introduced into the rectum and ℥ viij–to x water injected. The bladder is distended with ℥ xvj boracic acid solution (gr. x ad ℥ j). The bladder is distended to above the symphisis and the peritoneum pushed up above the bladder. An incision is made, three inches long, in the median line and just above the symphisis, and cutting down behind the symphisis into the bladder. The whole of the interior of the bladder is exposed, and the stone, or growth is readily removed. A T-shaped drainage tube, with the cross-piece in the bladder, and the other coming out of the wound and attached to a longer piece of tubing which empties into a basin, permits a free drainage or escape of the urine as it escapes into the bladder, without infiltrating into the wound. The bladder and external wound are not sewed up. Iodoform gauze is packed around the tubing outside the bladder, and the wound otherwise dressed as in a laparotomy case. The patient lies on his side, the tube remaining in place for from seven to ten days, and the wounds entirely healing in from ten days to three weeks, not longer than two weeks in any of Dr. Wyeth's cases.

The Polyclinic and Post-graduate schools open for the winter course next week. The Polyclinic has been overhauled this summer, a very valuable addition in the way of a hospital being added; the hospital is on the top floor of the building and will accommodate thirty patients. This will permit of all kinds of major operations being done in the building. One or two of the wards are to be devoted to obstetrics. The staff is the same as that last year, excepting that Drs. C. S. Bull and Heineman are made Professors of Ophthalmolcgy and General Medicine respectively. CANUCK.

SIR MORELL MACKENZIE will publish his answer to the German physicians in a few weeks, simultaneously in German and English.

To the Editor of the CANADA LANCET.

SIR, — At a meeting of the Peterborough Medical Society, held in this town on the 20th inst., the usual business of the meeting was postponed out of respect to the memory of the late Dr. Collins, and the following resolution adopted :

"We, the members of the Peterborough Medical Society, having learned with sincere regret of the death of our late friend and brother practitioner, Dr. Collins, take this opportunity of conveying to his sorrowing family and friends our heartfelt sympathy in their sad bereavement.

"As a member of our Society, he was prominent in promoting its best interests, and from the diligence with which he applied himself to his professional duties, gave promise of a life of usefulness and success. In his intercourse with his professional brethren, he was always kind and courteous, and in his untimely death we sustain a severe blow, and our town loses a useful citizen."

WM. CALDWELL, *Sec.*

Peterborough, 24th Sept., 1888.

Reports of Societies.

CANADIAN MEDICAL ASSOCIATION.

The twenty-first annual meeting of the Canadian Medical Association was held this year at Ottawa, and proved very successful. The attendance was large. Amongst those present were Drs. Sir James Grant, Ottawa ; Graham, Cameron, Workman, Sheard, Toronto ; Mullin, Hamilton ; Ross, Roddick, Girdwood, Shepherd, Gardner, Alloway, Trenholme, Campbell, Proudfoot, Smith, Bell, Buller, Rodger, Montreal ; Mackay, Woodstock ; Bray, Chatham ; Bunt, Paris ; Griffin, Hamilton ; Sweetland, Small, Powell, Hill, Ottawa ; Browne, Melbourne, Que. ; Pickup, Brockville ; Smith, Seaforth ; Machell, Toronto ; H. P. Wright, Cousens, Hurdman, Potter, S. Wright, Robillard, Ottawa ; Whiteman, Shakespeare ; Henderson, of Kingston, president of the Ontario Medical Society ; Milne, Victoria, B.C. ; G. H. Oliver, delegate from the Medical Society of the State of New York ; Wallis Clark, Utica, N.Y. ; Imrie, Detroit, Mich., and James Macfie, Fort Covington, N.Y.

FIRST DAY'S PROCEEDINGS.

Dr. Graham, Toronto, the retiring president, formally opened the meeting. He said that he thought they might congratulate themselves upon the prospects of having a very pleasant and profitable meeting, and they could the more confidently do so, seeing that they had selected as president for this year, a gentleman in every way capable of fulfilling the duties of that office, one who was a leader of his profession in one of the largest cities of the Dominion, and whose reputation is not alone confined to that city, but to the Dominion at large. He took great pleasure in introducing Dr. George Ross, of Montreal, the president.

Dr. Ross took the presidential chair, and in appropriate terms returned thanks for the complimentary reference made to him by Dr. Graham.

Dr. Bell, Montreal, general secretary, read the minutes of the last meeting.

Drs. Sir James Grant, Ottawa ; Workman, Toronto ; Hill, Ottawa ; Mullin, Hamilton, and Graham, Toronto, past presidents, were invited by the president to seats upon the platform.

The following were appointed chairmen of sections : Medical—Dr. Bray, Chatham ; Surgical—Dr. Cameron, Toronto ; Obstetrical and Gynæcological—Dr. Trenholme, Montreal.

Dr. Graham, Toronto, pointed out that, last year, a committee was appointed to consider what methods should be adopted with the view of furthering the interests of the Association, and to report at the present meeting. It was felt that the Association was not in as flourishing a condition as it should be, and did not have the sympathy of the profession throughout the Dominion as it ought to. Some parts of the Dominion have never been represented in the Association. Then the by-laws were found to be very defective, and there was no proper list of members of the Association. Owing to the absence of Dr. Stewart, a member of the committee, in Europe this summer, nothing has been done by the committee, and he suggested that another committee might be appointed for this purpose, to bring up a report at the next annual meeting, that might be of benefit to the Association.

On the motion of Dr. Roddick, Montreal, seconded by Dr. Bray, Chatham, a committee for the above purpose was appointed, consisting of the president, ex-president, president-elect, and the secretary and treasurer.

The secretary, Dr. Bell, of Montreal, stated that at least a dozen members of the Association have written to him for lists of members, which he has

been unable to supply. The last list of membership was made up in 1877, and nearly half of the gentlemen whose names were on this list have since died. Consequently the list is now quite obsolete. Again, the by-laws since 1877 were by-laws compiled at that time, and are distributed through the minute book. A great deal of work would be required to put these by-laws into proper shape and to have a correct membership list.

Dr. Girdwood, of Montreal, drew attention to the question of registration in Great Britain. He said:—I happened to be over in the old country a short time ago, and while there enquired of the medical profession as to the terms upon which reciprocity of registration might take place between Great Britain and Canada. They told me we would have to wait until an Order-in-Council had been passed by the Queen, making the new law applicable to Canada, and until that step had been taken there could be no reciprocity of registration. On my return here, I was told that application had been made on behalf of McGill College for such registration with Great Britain, and that reply had been made that until Canada acted as a unit, and not as individual provinces, this Act conld not be put into force. Now, reciprocity has taken place between Great Britain and her colonies in Australia, and I think we might fairly have reciprocity of registration between Great Britain and this country. The difficulty seems to be a want of harmony existing between the different provinces, that they will not admit one another to practise within their own precincts; and I thought that perhaps this difficulty might be overcome if the subject was brought up at this meeting. With that view, I propose that a committee be formed to make enquiries and ascertain the views of the different provincial societies in the matter. I see that there is a vast difference in the fee charged here. In Manitoba an Act has been passed compelling every medical man, no matter where his qualifications are from, to pay $100, and to submit to an examination. You all know, of course, the fees charged in Ontario and Quebec. I would therefore suggest that a committee be appointed, composed of Drs. Wright, Campbell, Sullivan, Eccles, Milne and myself, to enquire into the matter, and report at the next meeting of the Association, upon what terms reciprocity of registration may be obtained between the different provinces and the mother country and other colonies.

Dr. Bray, Chatham, remarked that he could not see what good such a committee could do. Each province has its Board, and they are all apparently a little jealous of one another. He spoke more particularly of the Province of Ontario. Their Medical Council has an Act by which they are guided an Act passed by the Government of the province—and he thought that this matter would have to have real legislation in all the provinces before anything might be done. It is something that he had thought of, and, in the address to the Ontario Medical Society, on retiring from the presidential chair, he brought this matter before them, and thought it a great pity that, in this Dominion, there should be the difficulty, of a man practising in one province, not able to practise in another province without passing an examination. As far as they were concerned in Ontario, they could get over the difficulty, for provision is made in the Act dispensing with the necessity of examination, provided the other provinces have a standard of examination equal to their own. With regard to reciprocity of registration with Great Britain, he said that a great deal of correspondence has been going on between the Ontario Medical Council and that of Great Britain on the subject. A committee has been appointed by the Ontario Society to examine into the question, and to report at its next session. They are going into it fully. At present it seems impossible Great Britain will give us reciprocity, but you have to be a resident for five years there, if you are registered in Ontario. The great trouble in Ontario was, until the Medical Act was passed by Great Britain, that students here could go to some medical college in the neighboring republic, obtain a degree, and become recognized in Great Britain. They would ignore our Medical Council, come over here, and compel us to pass them in a short time. Until we can have an equal standard of examinations in all the provinces, he thought reciprocity of registration would be almost impossible. He thought it would be of advantage to have a member of each council in the different provinces meet the committee, so that they could consult together and see what might be done. We in Ontario look upon the Medical Council examination as a little more stringent than they have in Quebec. After graduating from a university in Quebec no further examination is necessary, and by paying a certain fee, they can be registered as members of the Medical Council of Quebec. Now, as you all know, in Ontario that is not the same. We have a very stringent examination, as can be seen by the last examination, where a great many students were plucked after having passed the Universities. So you see there is a great difference in this respect, and not until the other provinces come up to our standard of examination can we have reciprocity of registration between the provinces.

Dr. Campbell, Montreal, said, in the first place, that, as a University man, it did not follow in his mind that because 175 men were rejected in Ontario, the examination in Quebec was an inferior one. We know sometimes that the very best men are unfortunate in being rejected. He was strongly

in favor of reciprocity between every province of the Dominion. It was a well known fact, that Sir Charles Tupper stated in the House of Commons that no man was more mistaken than himself when he found that education was left to the provinces, instead of being left to the Federal Parliament.

In the Province of Quebec, within the last year, an attempt was made to adopt a system similar to that in Ontario, but the Bill for that purpose was rejected by the Quebec Legislature last session. It was strongly opposed by the profession, and the Universities. The latter felt that they possessed certain privileges under their Royal Charter which they were not disposed to give up. He thought that as far as the Province of Quebec was concerned, anything like a central board existing there was in the very far future. The University men felt, and, he thought rightly and strongly upon the point, that it was impossible in the province, without a very great amount of education, to get a class of men who could examine in the various subjects and that really it would be to submit men to an inferior examination than what is now submitted to them by a University that has a reputation, and whose existence is not of yesterday.

Dr. Mullin did not think Dr. Bray had reference to the standard of examinations at all, but to the system in force in Ontario. They looked upon their Ontario system as a superior system to others, and their Universities have not objected to allowing their graduates pass before this Board. They have been obliged to do so, but the Ontario Act, he thought, will admit students from other provinces, provided that those provinces have a system similar and corresponding to our own. It would be an unjust discrimination against our own Universities in Ontario if we compelled their graduates to pass before the Central Board, and allow graduates of other Universities to come in and practise on their licences. He thought that that would be the only condition on which the Ontario Act would admit of reciprocity. The Act had no reference to the standard of examinations. We all know that the examinations in McGill College University must be just as good, perhaps some will say a little better than our own, but they are all of the same degree of excellence, and yet graduates of the University of Toronto have to pass an examination before the Central Board. He looked upon it that they are not likely, so far as Ontario is concerned, to have reciprocity so long as the licentiates of every province are licensed as they are at present.

Dr. Bray said that Dr. Mullin was quite right, and that he was sorry if he was misunderstood. He did not mean to insinuate for one moment that the examinations in Quebec were not equal to those in Ontario.

Dr. Cousens, Ottawa, thought that the discussion which arose might as well not have arisen. The object of the mover of the resolution was to bring before the medical faculty the fact that we are living in the Dominion of Canada, and not merely in a province, and that it would be advisable to have one licence to practise in any part of the Dominion.

Dr. Girdwood said that his object was not to stir up any question as to which examination might be better. That is a matter which they had nothing to do with. What is wanted is reciprocity of registration.

THE PRESIDENT'S ADDRESS.

The president then delivered a masterly address. He first commented upon the extraordinary progress of the Dominion, and pointed out the activity in all branches of science and learning. There had been during these years of progress an almost entire revolution in the science of medicine and in the methods adopted for teaching the same. Preventive medicine had occupied a place to which its importance justly entitled it, and sanitary laws and regulations were attracting the attention and occupying the minds of statesmen. Never was there a time when more attention was being given to the enforcement of sanitary laws and the diffusion of sound sanitary knowledge. In regard to medical tuition, instead of the old fashion of walking the hospitals, a systematic attendance at the wards was being insisted upon. He approved of the development in regard to specialists, and held that the whole profession had been a gainer by the work of such medicos, and the good done counterbalanced to a great extent the objections urged, that specialists were being overdone or were being cultivated by unworthy members. He advocated the establishment of a Dominion annual register at Ottawa, so that on entering therein, it might be possible to practise medicine throughout the whole Dominion without prejudice to the official bodies in the different provinces. He claimed for the Dominion Medical Association a share in bringing about the improved state of things in the present day. Although they failed to carry through such comprehensive measures as were advocated at first, they had been occupied in considering matters of general hygiene, and the discussions at their meetings had been instrumental in the carrying into effect of legislation which promoted the public health. He deprecated the laxity of the officials in a city not very far from Montreal where typhoid fever was prevalent, and their hesitation in trusting to experienced practitioners whose efforts would do much to alleviate the ravages of the outbreak. It was a reflection upon our sanitary organizations that such things could be and that no efforts were made to eradicate the evil as soon as discovered. The president also gave excellent advice in regard to alleged cases of malpractice which occasionally

were made public, and deprecated the contentions upon such matters which were originated and fomented by unworthy physicians. He regretted the small attendance of their French Canadian confrères, but hoped the interest of these in the association would increase in the future. He praised a trip to the Northwest and British Columbia as likely to greatly invigorate the jaded physician, and extolled the sulphur springs at Banff, which were not nearly so well known as their merits entitled them to be. He also referred with regret to the demise of several talented members of the association.

Dr. Workman moved a vote of thanks to the president for his able address. The motion was seconded by Dr. Campbell, who expressed the pleasure afforded him in listening to such an admirable address, as well as to the practical suggestions contained therein, and hoped that Dr. Ross would give them the benefit of any suggestions he might make in the view of obtaining reciprocal registration.

Dr. Sir James Grant, Ottawa, in supporting the motion, said that he was very glad to have the opportunity of listening to the admirable address delivered by the worthy president, Dr. Ross, of Montreal, and it was to him a matter of great pleasure to see present the mover of the resolution, Dr. Workman, Toronto, now in his 84th year. It is a fitting recognition to our Society to have here to-day, Dr. Workman, so well known, not only in the Dominion of Canada, but throughout the length and breadth of the world, to move to Dr. Ross a vote of thanks for the masterly address delivered. Dr. Grant then spoke in regard to the establishment of a Bureau of Health statistics in Canada, and hoped that the Dominion Government will embrace the first opportunity, as suggested by Dr. Ross, to establish such an institution, and that the whole profession in Canada will co operate with it in order to carry out properly the great principles of public health.

Dr. Sweetland, Ottawa, on behalf of the local medical association, then extended a hearty welcome to the visiting members of the profession, and assured them that they would receive that hospitality at their hands which is customary amongst medical men wherever they may meet.

The meeting then adjourned for lunch, to meet again at 2 o'clock.

AFTERNOON SESSION.

Dr. F. J. Shepherd, Montreal, read a well prepared and deeply interesting paper on "Recent advances in surgery," which will be found in another place in this issue of the LANCET, for which he was warmly thanked.

At three o'clock, the various sections met. The work transacted in the various sections was as follows:

Medical Section—"The influence of the nervous system on the nutritive processes," Dr. T. W. Mills, Montreal.

Surgical Section—"Excessive hæmorrhage after cataract extraction," Dr. Proudfoot, Montreal.

Obstetrical and Gynæcological Section—Address in Obstetrics, Dr. K. Fenwick, Kingston. "Indications for, and comparative merits of, Emmet's and Schroeder's methods of operating upon the cervix uteri," Dr. T. J. Alloway, Montreal.

SECOND DAY'S PROCEEDINGS.

After the meeting had been called to order, Dr. Ross, president, introduced to their notice Drs. G. H. Oliver, delegate from the Medical Society of the State of New York; Wallis Clark, Utica, N.Y.; and Dr. Imrie from Detroit, Mich.

Dr. Henderson, Kingston, president of the Ontario Medical Association, was then called upon to speak. He assured them, as representative of the Ontario Medical Association, that any sentiments of friendly feelings which they might convey to that association would be heartily reciprocated by its members.

The Nominating Committee presented a report in which they recommended the appointment of the following officers:—President, Dr. H. P. Wright, Ottawa; General Secretary, Dr. James Bell, Montreal (re-elected); Treasurer, Dr. H. P. Aikins, Toronto; Vice-Presidents, Ontario—Dr. C. Sheard, Toronto; Quebec—Dr. F. W. Campbell, Montreal; New Brunswick—Dr. Graham, Bathurst; Nova Scotia—Dr. E. Farrell, Halifax; Prince Edward Island—Dr. Jenkins, Charlottetown; Manitoba—Dr. Lynch, Winnipeg; Northwest Territories—Dr. Jukes, Regina; British Columbia—Dr. J. W. Lefebvre, Vancouver. Local Secretaries, Ontario—Dr. Griffin, Hamilton; Quebec—Dr. A. N. Worthington, Sherbrooke; New Brunswick—Dr. Keller, Fredericton; Nova Scotia—Dr. Webster, Wolfville; Prince Edward Island—Dr. McLaren, Georgetown; Manitoba—Dr. A. H. Ferguson, Winnipeg; Northwest Territories—Oliver C. Edwards; British Columbia—Dr. Milne, Victoria.

Dr. Proudfoot, Montreal, moved that a vote of thanks be tendered to Dr. Sheard for the long and valuable services rendered by him to the association in the capacity of treasurer. The motion was seconded by Dr. Trenholme, Montreal, and was unanimously carried. Dr. Sheard held the office of treasurer for the past seven years.

On the recommendation of the Nominating Committee, whose report was adopted, that the meeting of the Association next year should take place at Banff, a long discussion ensued.

The president stated that Toronto had been also talked of as the next meeting place, and that Dr. Eccles had sent a telegram from London inviting

them to meet there. He suggested that if they decided not to transact their business at Banff, they could meet at London, Toronto, or some other place, and afterwards proceed on an excursion to Banff. The committee thought that the claims of the western medical men, and the desirability of making the Association as thoroughly Canadian as possible, were considerable, and they therefore decided to recommend that the Banff Springs should be the meeting place for next year.

The secretary read a communication from Lucius Tuttle, general passenger agent C.P.R., offering first-class tickets with meals to and from Banff, with four days' living at the Banff hotel, for $95.

Dr. Workman said it always appeared to him that one of the great disadvantages under which this Association labored was its itinerancy. One year in London, the next in Halifax. He suggested that a permanent place be named at which to hold meetings of the Association. Sir James Grant, Dr. Proudfoot and others spoke on the matter.

Dr. H. P. Wright, Ottawa, thanked the Association for the honor conferred upon him in electing him president for the ensuing year, and would endeavor to do all in his power to fulfil the duties of that office in a manner that would meet with the approbation of the members of the Association.

The members then dispersed, to meet in the various sections.

The following papers were read in the various sections :—

Medical section—"Extreme rapidity of the heart's action," Dr. Graham, Toronto; "Ophthalmoplegio externo," by Dr. Howard, Montreal. *Surgical section*—"Retropharyngeal tumors," Dr. Fenwick, Montreal; "A case of exostosis bursata seer cartilaginea," Dr. James Bell, Montreal; "Mania following operations," Dr. Shepherd, Montreal. "Remarks on penetrating wounds of the eyeball," Dr. Buller, Montreal; "Some eye symptoms due to cerebral lesions," Dr. Stirling, Montreal. *Obstetrical and Gynæcological section*—"Necessity of attention to the antiseptic treatment, and of performing all the operations with care," Dr. Lapthorn Smith, Montreal.

FINAL BUSINESS.

The association resumed its sitting at 5 o'clock. Dr. Milne, Victoria, B.C., moved the following resolution, which was seconded by Dr. Sweetland, Ottawa, and carried unanimously :

"That in view of the apparently increasing prevalence of tubercular disease in domestic animals, and more especially in cows, in the opinion of this association it is desirable that some legislative action should be taken by the Dominion Government to check the progress of this disease, and we urge that the Government take this matter under their consideration at as early a date as possible."

Votes of thanks were passed to the retiring officers of the association, the medical profession in Ottawa, for their generous hospitality, and to the government for the use of the railway committee rooms of the House of Commons, and the meeting was then brought to a close.

Selected Articles.

PAPOID IN THE TREATMENT OF DIPHTHERIA.

My object in reporting these cases is threefold: First, to try and turn the attention of the Society a little more to the study of children's diseases; second, the field of both obstetrics and gynecology has been so repeatedly reviewed since the organization of the Society, that there are few new subjects; and third, to call your attention to papoid, a comparatively new remedy in the treatment of diphtheria. Hoping that, although I may have nothing new to offer *you*, *I* may gain new and practical ideas from your discussion, I submit the following report:

On the morning of November 22nd, I was called to see M. P., a boy of 11 years. His mother informed me that the day previous he complained of chilly sensations, pains in back and limbs, nausea, headache, and pain and difficulty in swallowing; that during the night he had high fever, and was delirious. These symptoms not abating, she had sent for me.

In reply to my questions, his voice was thick and nasal, but neither hoarse nor toneless. Complained of great difficulty in swallowing, and stiffness and soreness about the neck and angles of the lower jaw. The parotid and submaxillary glands were enlarged and tender, respirations quickened, but easy and regular; his temperature was 105°, pulse 140 and feeble. On examining his throat, irregular patches of lymph, or false membrane, thin, as though consisting of single layers of lymph, could be seen on both tonsils, that upon the right tonsil being larger and thicker than the patch upon the left. These formations could not be wiped away, or removed with a mop of absorbent cotton without too great force or pain to the patient. The posterior pharynx, uvula, and pillars of the fauces were intensely congested and swollen, the whole fauces filled with a sticky, tenacious mucus, which he was constantly trying to get rid of by hawking and spitting. I told his mother that her son had diphtheria, and nothwithstanding that, up to my visit, the other children had been with him, sleeping in the same room, I ordered them not to enter his room again under any pretence, and the patient isolated from all except his nurses. This

was at once done, and every precaution possible, under existing circumstances, was taken to guard against the spread of the disease, the mother and grandmother waiting upon the patient.

Concentrated liquid nourishment was ordered to be given every three hours, and one or two tablespoonfuls of whiskey, depending upon the frequency of the pulse, every three hours; the time-honored tincture of the chloride of iron and chlorate of potash treatment every three hours; between the hours, for the administration of the medicine, the throat to be gargled and mopped with the following: Carbolic acid, gtt. xxx.; chlorate of potash, ʒ iij.; glycerin, ℥ ij.; and lime water, ℥ iv. The mop used to be made by twisting a piece of absorbent cotton around a pliable stick or applicator. This mop in every case to be burned as soon as used, and fresh ones to be made for future use, small pieces of cotton cloth or rag to be used instead of handkerchiefs; these also burned after use; commercial carbolic acid to be constantly kept in all vessels used by patient to spit in.

November 23rd.—He had passed a very restless night, high fever, and active delirium up to early morning hours, after which he slept quietly at intervals only. Temperature 104.5°; pulse still feeble, but not so frequent (130); respirations easy and regular; during night had a normal movement from the bowels. Kidneys acting normally; an increase in glandular inflammation, extending to deep cervical glands. More tenderness and enlargement than on the day before. Had there been any doubt as to the nature of the disease, the present condition of the patient would have removed it. During the past twenty-four hours the membrane had rapidly increased and extended, small patches had coalesced, forming large masses. The tonsils were almost entirely covered, whilst here and there, flecked over the back of the pharnyx, uvula, and pillars of the fauces were patches of membrane of varying size and thickness. That upon the tonsils was quite thick, and of a dirty, ash-gray color. The later formations, composed of but single layers of lymph, were, in some places, thin, showing the subjacent tissues beneath them, in others, approaching the leathery appearance of that upon the tonsils. Notwithstanding the regular administration of the medicine, and use of mop and gargle as ordered, the breath was very offensive, and fetid, and he was vainly trying to hawk and spit up the viscid and tenacious mucus which the highly inflamed mucous membrane was rapidly throwing off. The thin, watery discharge from the nostrils indicated that the disease had invaded the nose.

In addition to the treatment of the day before, I ordered the nostrils sprayed, or syringed, every two or three hours with a warm dilution of the carbolic gargle. A five-per-cent. solution of papoid, in equal parts of Price's glycerin and distilled water, to be applied to the throat by means of a mop of absorbent cotton, every hour, if necessary, every half-hour. Every particle of membrane in sight or reach to be slowly and carefully pencilled or swabbed with this preparation, the mop to be fully saturated with it, so as to carry an ample supply into the pharynx, to insure that all parts of the throat should be reached, this to be done night and day; if necessary, to combat exhaustion, the dose of whiskey to be increased and given at shorter intervals.

November 24th.—Considering the frequent interruptions, he passed a tolerably good night, said his throat felt better. His temperature had fallen to 101°, pulse to 110, gaining in strength as it diminished in frequency. The glandular inflammation was diminishing, there was less tenderness and hardness. The most marked change was to be seen in the membranous formation in the throat; some patches had entirely disappeared, others considerably thinned, soft pultaceous masses come away upon the mop. In using some force in swabbing the throat myself, the mop was tinged with blood, and on examining the throat afterwards, one or two bleeding points could be seen where the membrane had been torn off. Very little fetor, and the secretion of mucus so far diminished as to give very little trouble. I ordered the treatment continued. Nourishment and whiskey, which he rebelled against, to be regularly administered.

November 25th.—A very marked improvement, his temperature was normal, only a few patches of thin, softened, partly dissolved membrane to be seen, and these in localities hard to reach with mop, extending from behind the swollen tonsils, and hanging from behind the veil of the palate. I carefully and slowly applied the papoid solution to every available part of the throat, and ordered it continued as before, allowing a little more time for sleep during the night, provided there was no extension or increase in the membrane.

November 26th.—Normal temperature, glandular inflammation rapidly disappearing. Throat clear of membrane, large plugs or masses had been discharged from posterior nares after syringing, and the nasal respiration was quite free; some catarrhal discharge. There was no perceptible fetor.

The interval between the doses of the iron mixture lengthened to four hours, and the papoid solution to be alternated with it every four hours. Carbolic solution to be used as gargle and mouth wash *ad libitum*. Nose to be syringed every four hours.

November 27th.—Favorable symptoms continuing; passed a good night, appetite good, very slight catarrhal discharge from nostrils, no false membranous formation in the throat. Tonsils and pharynx still inflamed, and showing considerable loss of substance from ulceration; irregular, sharply-defined depressions on both tonsils. Con-

tinue general treatment, but omit applications of papoid. Mop the throat and syringe the nostrils every four hours with the carbolic gargle. From this date his convalescence was slow but steady. There was marked prostration for about a week after the disappearance of the membrane from the throat, and for four or five weeks after leaving his bed, he could not read without much pain in his eyes, owing to a slight impairment of accommodation, due to partial paralysis of the ciliary muscles. There was also a lax, flabby uvula and veil of the palate, which gave him a nasal voice for a few weeks. At this date, all these have disappeared, and he is in perfect health.

I have reported this case in full, doubtless entering into needless detail, from its beginning to the entire disappearance of all false membrane, it being the first of a series of six cases, five of which occurred in one family, the sixth in a household remote from the others; none of which differed, however, one from the other, except in degree of severity of the disease, and a tendency in one case for relapses, or re-formation of false membrane after its disappearance for several days. In regard to the remaining five, I shall confine myself to the throat symptoms only, as the object of this paper is to call your attention to papoid as a solvent and disinfectant of false membrane, and not to the treatment of diphtheria in general, its symptoms, etiology, or pathology.

December 1st. The grandmother of M. P., aged 76, was taken with pharyngeal diphtheria. The tonsils and posterior pharynx showed large patches of false membrane. Again I waited for twenty-four hours before applying the papoid solution to the throat, that I might be more certain of its action, confining my treatment to iron and potash internally, and the aforesaid gargle locally, and such constitutional and stimulating measures as the age and feeble condition of the patient demanded. On the morning of December 2nd, the membrane had increased in extent and thickness. I ordered the papoid solution, five per cent., applied every hour, night and day, every half-hour during day if necessary. December 5th. Throat free from membrane; convalescence unbroken by any complication or sequelæ. 19th. The mother ill with pharyngeal diphtheria; tonsils, uvula, and posterior pharynx full of false membrane, glandular inflammation. Papoid, in addition to same treatment, every hour or half-hour, night and day.

22nd. Throat free from false membrane; papoid omitted from treatment. 23rd. Reappearance of membrane on tonsils and uvula, rise of temperature; return to papoid applications every hour. 24th. Membrane disappearing, temperature normal. 25th. Membrane gone. 28th. Membrane reappeared on pharynx and tonsils, small patches only; papoid applied every hour. 30th. Throat clear, convalescence slow but complete.

Mattie, the sister, aged 13 years, was taken on December 22nd. Active inflammatory condition, temperature 105°; fauces full of false membrane: papoid applications every hour or half-hour, in addition to specified general and local treatment. In forty-eight hours, the temperature fell to normal, and the throat was free from membrane; convalescence rapid.

Mary, the other sister, aged between 14 and 15, was taken ill on December 27th. Active inflammatory symptoms, glandular inflammation decided. Membrane on tonsils, back of pharynx, uvula, and pillars of fauces. Same treatment, papoid applied every hour or half-hour. January 2nd. Throat clear of membrane, temperature normal, all other symptoms most favorable; papoid omitted. 4th. Reappearance of false membrane on tonsils; return to papoid. In twelve hours throat clean, convalescence unbroken.

December 22nd. I saw Harry E., aged 4 years, threatening convulsions, high temperature, pharyngeal diphtheria, membranous deposit considerable. Potash and iron treatment, papoid every half-hour, every hour during night. December 23rd. Difficulty of breathing, owing to accumulation of mucus in throat, during night alarming. 25th. Very little membrane to be seen, only a little behind one tonsil. Sitting up in bed playing with Christmas toys; temperature normal. 26th. Membrane gone, convalescence slow.

Whilst these cases are too few in number to establish beyond question the value of any plan of treatment, and granted that they showed no malignancy, or great degree of severity beyond their primary stages, the unvarying results of the application of papoid, at very frequent intervals, justifies me in the following conclusions: That papoid, applied to diphtheritic membranes, is a safe and reliable solvent; that it possesses antiseptic properties; that the temperature falls rapidly with the disappearance of the membrane, which, according to Jacobi, proves the rapid absorption and elimination of the diphtheritic poison; that the phenomena of secondary blood poisoning were absent, owing to the rapid solution of the membrane, supplanting the processes of suppuration by which it is removed if left to itself. That the period of incubation either varied from eight days to thirty-five days, or the poison was conveyed to the two children, who had no communication whatever with the sick, by the clothing of those who did the nursing. That age is not exempt; that there is a marked family susceptibility to the poison of diphtheria, as evidenced by the fact that, whilst a friend who assisted in nursing, and the servant, a colored woman, who was in the sick-room a dozen times a day, escaped; every member of the family, from the youngest child to the grandmother, contracted the disease.—J. R. Bromwell, M.D., in *Jour. of Obstetrics.*

KROHNE'S MODIFICATION OR THOMAS' DOUBLE HIP SPLINT FOR THE TREATMENT OF DISEASES AND INJURIES OF THE SPINE.

The well-known Thomas' double splint for disease of one or both hip joints (Fig. 1) is rendering great service in the treatment of that affection. Mr. Krohne has added to this splint a pelvic band, a support for the shoulders, neck, and head, and two sliding foot-pieces, as shown in Fig. 2. The two upright bars are made after the shape of a healthy, normally formed child when in the recumbent position.

They give posterior support to both sides of the spine. The two cross-bars, the pelvic band, and the band reaching to below the axillæ, support the

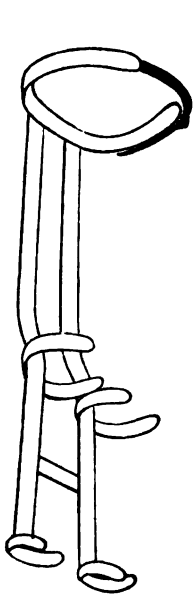

FIG. 1.

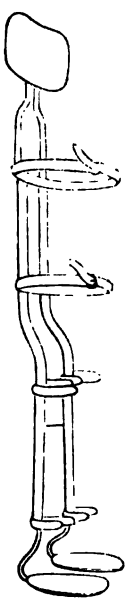

FIG. 2.

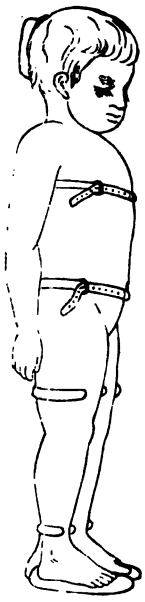

FIG. 3.

pelvis and body laterally. The lower extremities are kept in position by cross-bars supporting the thigh and lower third of leg. The rest of the splint consists of the support for the shoulders, neck, head, and both feet, so that the entire body is supported, as shown in Fig 3. The first object in the treatment of spinal caries, weak or injured spine, is to devise means whereby the weight of the head and upper extremities is taken off the spine. This is obtained by placing the child and retaining it during the whole time of treatment in the uninterrupted recumbent position. By the aid of this splint the surgeon is enabled to carry out this treatment, and, the splint being applied next to the skin, the child can perform its natural functions without the removal of the apparatus. The second object is to fix the spine, which is effectually done by placing a wide bandage around the body and the splint; further, to prevent the child from raising its knees and using the legs as levers, and thus jerking the spine, both legs are bandaged to the splint. Both feet and ankles are also supported by a bandage, to protect the feet from the pressure of the bedclothes, and to prevent them from dropping forward or to either side. The bandages are not shown in the engraving. With slight modifications, the splint can be adapted to cases of disease or injury of the lumbar, dorsal, or cervical part of the spine. Most cases of advanced spinal disease are accompanied with contraction of one or both hip joints. No special notice need be taken of such contractions. The child is placed with its back on the splint, care being taken that the fold of the buttock corresponds with the angle of the splint, and the bandage is then applied. The child is next made to straighten its legs as much as possible. Any existing angle under the knee is filled up with soft padding, and the legs are thus bandaged to the apparatus. The contractions will be gradaully corrected by the limb dropping, by it own weight and without pain, to the straight line of the splint, which will be noticed by the bandage getting loose. Some of the padding must then be removed and the leg re-bandaged. This has to be repeated until the limb has dropped to the straight line of the splint. The same straightening process goes on simultaneously in the spine, correcting lordosis or any other abnormal curvature. The pelvis forms the fulcrum, and the body above and the limbs below it are the levers, dropping by their own weight to the line of the splint without the slightest pressure being required. Throughout the whole time of treatment care must be taken not to cause pressure on any part It is, therefore, absolutely necessary that the child be placed, after the adjustment of the splint, on a soft and loosely stuffed feather bed, when the bars of the splint sink into the bed, and the feathers rise and support the whole body. Some absorbent cotton-wool should also be placed on and above the heel. When supporting it by a bandage to the sliding foot-pieces, fresh cotton-wool should be employed. whenever the bandage is replaced. Attention must also be given to all the cross-bars, which must be bent away from the body if undue pressure be caused by them.—*Lancet*

DR. SCHWARZENBURG'S DISCOVERY.

I am a distinguished physician, to start with. Not one of your pitiful American M.D.'s, with a sheepskin he cannot translate and a smattering of the sciences Such birds of prey are unknown in the magnificent therapeutical institutions which are the glory of France and Germany, and which produce among their alumni such

scientists as I and Pasteur. During ten brilliant years I and Pasteur have been co-laborers in the field of inoculation. He devoted his divine genius to the prevention and cure of that mental disease we term hydrophobia; I applied mine to the subtler and more mysterious ones of the soul. He published his discoveries two years ago. I now publish mine in *Puck*, the only true scientific journal in America.

ANTI-KLEPTOMANIA VIRUS.

I remove the virus from the cheek of a prominent financier in temporary retirement, and inoculate with it a bank-messenger or cashier. In one week he is attacked with all the recognized symptoms of the disease. He buys a fast horse, and cultivates the ballot-girls in the latest opera. In two weeks he frequents Wall Street, and toys for hours with the ticker. In three weeks he purchases pools in horse-races. At the end of a month he packs his grip-sack and steals away to Canada or Havana. The original virus contains bacilli which under the microscope are shaped thus;

With the virus thus reduced in potency, by one transmission I then inoculate a public official. The disease which results is much milder than the preceding. The victim becomes red in the face, bloated, drunken and profane. Diamonds break out on his hands and chest. He loses the memory of words, and tries to express ideas by guttural sounds, such as "dmdfido," "colraboodle," skweeldlikhell," etc. He has an irresistible longing for bar-rooms, common-council chambers, nocturnal clubs, and even the State Assembly. The bacilli of his virus are of a new and hitherto unknown character, being cuneiform and cruciform in outline:

V Λ X ⋊ V V X X.

With the virus from this votary to science I then inoculate a promising law-clerk or a trust worthy dry-goods salesman. He soon evinces a strong distaste for business, and attaches himself to some newspaper. He becomes lazy, obscene, and an incorrigible liar. His imagination develops, and he is soon recognized as a reporter. The kleptomaniac symptoms seldom appear at this stage. The bacilli in his figures are fasciform, and resemble Roman figures on a slate:

I II IOU I II IOU.

With the virus from this fourth stage I inoculate a retired grocer or mason. He is sick ten days, and then is permanently changed. He becomes slow, sedate, stupid and respectable. In a short while the change is appreciated by the public, and he is made a bank-director or a church-deacon.

The merits of my discovery are patent to all, and offer absolute security to banks and other moneyed corporations. I will inoculate presidents and financiers, and guarantee the operation, for one thousand dollars. Liberal discount on cashiers and treasurers. Extra discount and commission, but no guarantee, on Aldermen or Assemblymen. No reporters treated!

PAUL PASTEUR SCHWARZENBURG,
M.D., Ph. D., E.M.
per W. E. S. F.

SALOL IN CATARRH OF THE BLADDER.—Arnold, of Stuttgart, in the *Therap. Monatsh.*, for July, relates the case of a patient, 80 years of age, with hypospadias, in which, on account of retention of urine, from paralysis of the detrusor urinæ, catheterization twice daily became necessary from the 2nd of January. The urine continued clear and of acid reaction until the 20th. At this time there was some difficulty in passing the catheter. Notwithstanding its most careful disinfection, acute cystitis manifested itself on the 21st. The urine became of ammoniacal odor, of alkaline reaction, turbid and precipitated a sediment of bloody mucus. Fever set in, with tenderness over the bladder and with strangury. On the 24th, the temperature was normal, and the pain in the region of the bladder had disappeared. In spite of rest abed, milk diet, cataplasms and warm baths, the urine maintained its normal condition until February 8th. Fifteen grains of salol were now given twice daily. As the drug was well borne by the stomach, the dose was increased to forty-five grains daily. To determine the action of the medicament, the urine was collected in appropriate receptacles. With the use of thirty grains a day, the urine slowly cleared up; the evening's urine was slightly alkaline and still ammoniacal; the morning's urine was slightly acid. Taking forty-five grains daily, the urine partook of a dark greenish color, but rapidly became clear; the discolored sediment, previously presented, steadily diminished. On February 16th, the urine, to the last drop from the catheter, was entirely clear and acid in reaction: more urine was passed spontaneously than had been so passed in many years. On the 18th, the salol was tentatively withdrawn; the day following, the urine was again cloudy and deposited a sediment. Forty-five grains a day were then given until the 28th; the turbidity disappeared after the first dose. A second tentative withdrawal of the salol on the 29th of February was followed by a result similar to that which followed the withdrawal on the 19th; turbidity and deposit of sediment, though in less degree. Forty-five grains were daily administered until mid-March, when the patient got out of bed; from that time on, thirty grains were given until April 3rd, when the dose was reduced to fifteen grains. In a few days, the urine, which had hitherto remained clear, again became turbid and deposited a sediment. At the same time the frequency of micturition was in-

creased. Thirty grains of salol were again ordered, followed by the disappearance of turbidity and sediment. Up to the 24th of April, five ounces had been administered. The general condition of the patient was excellent and the urine of normal condition.

The efficacy of the drug is assured in this case by its tentative withdrawal. Forty-five grains a day sufficed to check the ammoniacal fermentation in the bladder, and to maintain the urine clear and of acid reaction. It must be added that the salol was well borne; the tongue became clear and the appetite improved.—*Med. News.*

TREATMENT OF PNEUMONIA.—Dr. C. R. Illingworth says: "In my opinion, the best guide to the treatment of pneumonia is not its after-history, but its pathology. There is (as in all inflammatory processes) stasis of the blood in the pulmonary capillaries, followed by effusion of inflammatory lymph into the air cells. The aim in treatment, therefore, should be to obviate stasis by giving remedies which prevent coagulation of the blood, and with them also those which diminish the *vis a tergo*, so as to facilitate the passage of the stagnating blood through the capillary system. The old remedies for liquefying the blood were notably the carbonates of ammonia and soda; then there were those valuable remedies for that purpose, the salicylates of ammonia, soda and potash; and now we have a group of medicines which are even more powerful in that direction—the 'antipyretic' group, including antipyrin, antifebrin, kairin, etc., etc., antipyretic solely in virtue of their power of dispersing stagnating blood, and thus of relieving tension in the circulation. Those remedies which diminish the *vis a tergo* may be all described as cardiac depressants. They are digitalis, antimony, aconite, ipecacuanha, and strophanthus.

"In croupous pneumonia I give 10 grains of the salicylate of soda, and from 3 to 5 grains of carbonate of ammonia every two hours, with from 5 to 10 minims of the tincture of digitalis, and I frequently secure resolution in from eight to thirty hours. If by that time resolution should not occur, I prescribe the acetate of ammonia and digitalis, because it is useless to expect rapid resolution when the effusion of the fibrin is complete, as in the stage of hepatization, and because the destruction of the fibrin elements of the non-stagnant blood by the continued use of the salicylates, as indicated by their toxic effects, is not only inadvisable, but dangerous. I never give the salicylates in broncho-pneumonia, because, from abundant secretion, there is already deficient aëration, and consequently deficient fibrination of the blood. I give the acetate of ammonia, and for another reason; it is compatible with the perchloride of iron, in the event of the 'pneumoparesis' of Dr. Richardson supervening, as it frequently does in cases of broncho-pneumonia and croupous pneumonia in patients with great cardiac debility. That powerful hæmatinic, of course, without any depressant such as digitalis, is then urgently needed, in full and frequently repeated doses. Iron in this form is also the best tonic in all cases of pneumonia and broncho-pneumonia, as soon as all sympathetic febrile disturbance has subsided.—*Lancet.*

TREATMENT OF YELLOW FEVER.—In the *New Orleans Med. and Surg. Jour.*, Dr. R. H. Day contributes a paper upon yellow fever, from which the following abstract is taken:

First in importance he places the duty of reassuring the patient, and increasing his will-power. "Yes, you can recover if you will be a man and dismiss these hurtful and foolish fears." If the skin be hot and dry, he recommends a hot mustard foot-bath, with warm drinks; care being taken not to push the sweating too far. If the stomach be full, an emetic of warm water is given. After the operation of this, mustard is applied over the stomach, and small doses of mint or of morphine with soda given, while the face is frequently sponged with spirituous lotions. If a cathartic be needed, he objects strongly to castor oil, preferring enemata or senna and magnesia.

When the attack is ushered in by violent cerebral symptoms he bleeds freely until the brain is relieved. "To trust to revulsives and sedatives in such extreme cases were certain death."

For the septic condition of the system he prescribes a scruple of calomel and 30 to 40 grains of quinine, divided into two parts; one to be taken ever four hours. This is given in the hot stage, as early as possible, unless cerebral complications oppose the use of quinine. Nauses calls for a blister to the epigastrium, with ice or cold water moderately; sometimes a little creasote with morphine, soda and mint water.

Morphine or Dover's powders may be needed for insomnia. Cerebral hyperemia occurring later, calls for the bromides, with cold to the head. In one case the patient was saved by opening the temporal artery.

For black vomit or hæmorrhages he used the tincture of iron, in teaspoonful doses, perhaps, with ice and champagne or cognac. Suppression of urine he treats by cupping over the kidneys, and stimulating liniments with digitalis.

The mortality under this treatment was from 3 to 3½ per cent. He values the curative powers of quinine highly in non-malarial fevers, basing his opinion on an experience of over fifty-six years of active practice.—*Med. Times.*

GENITO-URINARY SURGEONS.—We have before us "the Preliminary Programme of the American Association of Genito-Urinary Surgeons," for its meeting to be held in Washington on Sept. 18th,

19th and 20th. There are no less than thirty-four communications on this preliminary programme. The expression "Genito-urinary Surgeons," which does not seem to us a happy one, indicates the disposition to erect a new specialty, which we trust will be reconsidered. The very enumeration of subjects will show the diversity of the complaints which are to be suggested as the special care of the genito-urinary surgeon: The effect of rapid changes of altitude in advanced interstitial nephritis, operations on the kidney, syphiloma of the vulva, the Filaria Sanguinis Hominis in the United States, especially in its relationship to chylocele of the tunica vaginalis testis, the prophylaxis of syphilis, demonstration of a perfected evacuator, and an improvement in the method of removal of débris from the bladder, etc. We readily grant and rejoice in the recent improvements of surgery in its application to the kidney and bladder and the related parts. But all this has been accomplished without the creation of a new specialty and without disjoining the operators from the great body of their surgical brethren. It is not a wholesome sign, this tendency for a group of men to fly off from the great body of their brethren and put a special label on themselves. Where is it to stop? Is syphiloma of the vulva to be regarded as something apart and special; or can it be separated without harm to the general conception of the case in which it occurs? Admitting that many of the local affections enumerated in this programme are highly important and demand exquisite surgical skill, can they be regarded as the special care of "genito-urinary surgeons" without narrowing surgery itself, and without risk to that larger view of local disease which often sees its origin in other than local causes? One thing is certain, that the men in our British schools who have shed most lustre on the surgery of these and other parts are general surgeons, in general hospitals, who would refuse to be labelled the surgeons of a part and not the whole of the body.—*Lancet.*

Quackery versus Regular Practice.—An instructive story, illustrating the preference of the public (at least in France) for quackery over science, is just now going the round of the French medical press. A provincial magistrate having received numerous complaints that a certain Monsieur L— was practising medicine illegally, sent for him and interrogated him as to the truth of the reports. To his surprise, the quack fully admitted the fact that he practised, but declared he was only acting within his rights, being a Doctor of Medicine of the Faculty of Paris, and produced from his pocket his diploma, which was perfectly regular. On being asked why he had concealed the fact of his being properly qualified and posed as a quack, he explained that he had done well as a student, and that having attracted the notice of some of the professors, he was encouraged to set up in practice in Paris. Although a few patients came, he was unable to pay his way, having expended all he had saved in the fees necessary for his diploma, etc. He left Paris in despair, and went on board a cod-fishing boat. In this way he earned a few hundred francs and returned to France, determined to give up medicine and to follow business for a livelihood. He found, however, from time to time opportunities of attending patients, but did not tell them he was a doctor. His fame spread, and he had been making a good income for the last ten years, during which time he had saved and invested about 10,000 francs. He was so convinced of the superiority of the position of a quack over that of a medical man, that he begged the magistrate to keep his secret; for he was positive that if it leaked out that he was a qualified man he would lose all his practice.—*Lancet.*

A Natural Cubic Centimetre Measure.—The *New York Med. Rec.* says: "Every one has at his disposal a cavity, viz., the external auditory meatus, whose capacity is about a cubic centimetre. The right meatus holds a little more than the left, and the capacity increases slightly with the height. The exact average capacity in one hundred men, according Hummel, is 1.06 c. c. How convenient! and what an argument in favor of the decimal system in weights and measures! It is now quite evident that nature had the system in view when she fashioned the cavity. Hereafter when a patient is ordered so many cubic centimetres of copaiba or castor oil, he will have no excuse for over or under dosing himself. He can measure it like he does the rhythm of poetry, or music, by ear. This may occasion some little discomfort and there may be some little trouble about getting the fluids out of the measure, but we have no doubt that as soon as the attention of our learned and ingenious New York cotemporary is called to the difficulty, it will suggest a method of overcoming it. It would be a pity to allow so striking a teleological fact to remain unutilized just for a trifle like that. And while our cotemporary is about it, it might institute a few additional measurements of the cavities of the body, so that every one may have at his disposal, a natural cubic centimetre table; thus: so many earfuls make a mouthful, so many mouthfuls make a bellyful, etc.—*St. Louis Med. and Surg. Jour.*

Complicated Case of Occlusion of the Vagina.—An instance of the rare cases in which a woman in labor is found to have complete occlusion of the vagina has been recorded by Dr. Zinsstag, of the Basle Gynecological Clinic. The patient, a young primipara, being in labor, on being examined by her family doctor, was found to have an occluded

vagina. He, thinking this arose from stenosis, sent her to the clinic When first examined there, the finger felt a narrow canal, at the end of which a sharp-edged circular fold separated it from a somewhat more extensive cavity; behind this latter cavity the fœtal head was felt through a thick septum. On inspection, it was discovered that the canal was not the vagina, but a dilated urethra, and the sharp-edged fold the sphincter of the bladder; the cavity was the bladder, and the membrane separating the finger from the fœtal head the posterior vesical wall. From the orifice of the urethra to the fourchette there stretched a strong bluish membrane, across which several veins ran. No opening capable of admitting the finest probe could be found. A somewhat similar case of persistence of the sinus urogenitalis is described by C. Von Braun in his text-book. Coition must have taken place through the urethra, and some opening in the hymen must have existed, permitting the escape of the menses, which had been normal, and also allowing of the introduction of the seminal fluid. This orifice must have become closed up during pregnancy. Incisions were made in the hymen and in the perineum, and the labor was satisfactorily concluded.—*The Lancet.*

THE TREATMENT OF BUBO.—The treatment of bubo resolves itself into several practical considerations: 1. We have the question of prophylaxis; 2. The prevention of suppuration; 3. The management of suppurating bubo; 4. The management of sinuses and exposed lymphatic glands; 5. The management of gangrenous and phagedenic bubo; 6. The management of chronic or indolent bubo.

Prophylaxis is much less likely to prove effective in chancroid. All strains and violent efforts must be interdicted. Approximate absolute quiet as much as possible. If a person has to stand, apply a double spica bandage with a compress in each groin to prevent the injurious effects of strains by supporting the part. Keep the bowels open.

2. To prevent suppuration we may counter-irritate with the iodine tinctures and apply pressure by means of a five pound shot-bag. A compressed sponge may be used, being held in place by a spica. Collodion applications are often of service. Kern's cataplasm of black soap and mustard is recommended. Injections of carbolic acid are not favorably regarded. Lead and belladonna ointments are advocated. Main reliance is to be placed upon poultices. Calx sulphurata may be given internally in doses of one-twelfth of of a grain every hour.

3. When we find that suppuration is inevitable, which is always the case in virulent bubo, we should at once endeavor to promote the formation of pus by every means in our power, and then open antiseptically.

4. When practicable, such sinuses should be thoroughly laid open, and the hard and indurated track cut away. They may sometimes be induced to heal by applications of the solid stick of the nitrate of silver, but they are quite liable to re-open, especially if the patient is cachectic, or moves about a great deal, as the tissue about them is of a very low grade of vitality.

We may also incise the external opening, and insert a wedge-shaped piece of wax, the base of which is gradually shaved off as the bottom of the cavity granulates. Injections of very hot water, frequently repeated, have also proved quite useful in my own practice. I usually combine them with the use of pencils or tents of iodoform, and it is this plan which has afforded me the most favorable results. The tent is to be dipped in vaseline, and then inserted into the sinus, care being taken that its bottom is reached. It is then cut off level with the surface, and powdered iodoform and a compress applied over all. I have also used a mixture of iodoform and glycerine, ʒij to the ounce, as an injection for sinuses and fistulæ in various situations, and have had excellent results.

The management of exposed and hyperplastic glands ought to be sufficiently simple. When free glands are found on opening a bubo, they should at once be removed, for if left, they will, as is known, act as foreign bodies, and prolong the healing process indefinitely.

5. The treatment of bubo, complicated by gangrene or phagedena, does not differ from that of chancroid attended by the same complications.

6. Here we must use the regular constitutional tonics, with a liberal diet. The bubo may remain bad and indolent a long time before pus forms. Here proceed as in 2. I have mentioned the method of punctate cauterization in connection with acute bubo as applicable to the treatment of the form at present under consideration. The modification of this method which appears to me most effectual, consists in drawing a series of intersecting lines over the surface of the tumor with the Paquelin cautery, in the manner often used in inflamed joints. Although not very painful, this method is usually objected to by the patient. Special mention is made of a variety of chronic bubo which accompanies the form of chronic chancroid, termed "lupus of the vulva," or in the male, chronic phagedena. This form of bubo is identical in its general characters with the lesion of the genitals, and presents an elevated, hyperplastic mass of tissue of greater or less extent, with an unhealthy pultaceous or worm-eaten appearance of its surface, which secretes an unhealthy, ichorous fluid. The disease extends very slowly, if at all, after having attained a certain size, the ulceration having meanwhile become continuous in many cases with the genital ulcer, There are apt to be several of the buboes, either distinct or connected by ulceration. Such cases

are very apt to be of a hemorrhagic nature when they occur in pregnant females. When this form of bubo refuses to yield to the ordinary local treatment and the usual routine system of tonics and dietetics, the occasional application of the actual cautery will sometimes exite a healthy action, with active granulation and repair. As a dressing, iodoform is probably the best substance. An infusion of cinchona may also be of service, a piece of lint being saturated with it and laid upon the part, to be subsequently wet sufficiently often to keep it moist.—*New Orleans Med. and Surg. Jour.*

Tape Worm.—Dr. B. R. Rivers, in *Illustrated Med. Jour.*, says: "In an experience of forty years, I have found nothing better than the following: ℞.—Bark of pomegranate root, ½ ℥; pumpkin seed, ½ ℥; ethereal extract of male fern, 1 ℥; powdered ergot, ½ ℥; powdered gum Arabic, 2 ℥; croton oil, 2 drops.

"The bark and pumpkin seed should be thoroughly bruised, and, with the ergot, boiled in eight ounces of water for fifteen minutes, then strain through a coarse cloth. The croton oil should be well rubbed with the acacia and male fern, then mixed with the decoction, forming an emulsion, to be given at one dose. The usual preparation made is to give a brisk cathartic the preceding night. No unpleasant effect is expected to follow, or at least, but little. Look for the worm in a few hours. This has been used by others, and I am not entitled to any credit for it."—*Am. Med. Jour.*

Formulæ for Rheumatism.—Dr. Chaplin recommends the following for acute rheumatism:

Salicylic acid,	℥ ss.
Sodium bicarbonate,	℥ x.
Potassium citrate,	℥ jss.
Wine of colchicum seeds,	℥ ss.
Simple syrup,	℥ j.
Peppermint-water,	ad ℥ viij.

Sig.—A tablespoonful every three or four hours.

For chronic rheumatism he gives:

Potassium citrate,	℥ ss.
Tincture of the chloride of iron,	℥ x.
Essence of lemon,	℥ j.
Simple syrup,	℥ ij.
Water,	ad ℥ iij.

Sig.—A teaspoonful every four hours.—*Med. Rec.*

Salicylic Acid locally in Diphtheria.—During the last three years, Dr. Ory has found the local use of a weak solution of salicylic acid (1 in 350) very serviceable in the treatment of cases of sore-throat of a diphtheritic type. He claims to have never had to do a tracheotomy in his practice, and to have helped almost all his cases, slight or severe, to recovery. In several of these his diagnosis of diphtheria was confirmed by other physicians. He is inclined to the conclusion that the early destruction of the patches on the pharynx or tonsils may prevent a more systemic infection. He holds back the head of the patient and introduces a large brush soaked in the solution of salicylic acid, and cleanses the mouth and pharynx with a firm hand, carrying out his treatment thoroughly and without hesitation, on the ground that the diphtheritic poison is destroyed by the salicylic acid and the mucous membrane not much irritated. Such a vigorous dressing he is anxious to apply frequently, at least three times a day in serious cases.—*Jour. de Méd.*

Paraldehyde in Obstinate Vomiting.—Having been in the habit of prescribing, in my practice, paraldehyde in the treatment of insommia in alcoholism, the patient usually being affected with gastritis, accompanied with obstinate vomiting, I have noticed that the first dose was sometimes rejected from the stomach, but the second, given usually in one or two hours, was almost invariably retained, notwithstanding the fact that for hours previous to treatment in the majority of cases, not the lightest form of food or liquid would remain. It occurred to me the same remedy might be serviceable in checking vomiting in other cases. I have used it in ovarian irritability with sympathetic stomach disorder, in vomiting of pregnancy, and in the distressing nausea of migraine, with the most gratifying results. The formula employed is as follows: ℞.—Paraldehyde, ♏ xl., Elix. simp. ℥ j.—M. Sig.—One teaspoonful in a little water, repeated in half an hour if required. This small dose in its effects is not hypnotic, acts as a sedative not only upon the mucous membrane of the stomach, but also has a tranquilizing effect upon the whole system. But few doses are usually required. The only objection to its use is its disagreeable odor.—*Albany Med. Annals.*

We do not know how true it is, but the *Pharm. Rec.* accuses a New York physician of having perpetrated the following:

℞.—Pulv. opii (folia) fresh,	℥iij.
Liq. Phimbi sub. acet.,	℥ij.
Aquæ,	℥viij.

M. ft. lotio.

St. Louis Med. and Surg. Jour.

She was the belle of the town, but was of an investigating turn of mind. Having by some means come across the word "gonorrhœa," she asked the family physician its meaning. He told her it was a technical name for headache. Being visited by a young physician, who inquired tenderly after her health, she replied: "I am quite well, thank you, except a slight gonorrhœa for the last few days." "He never smiled again."—*Med. Rec.*

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THE COLD BATH IN FEVERS.

The use of the cold bath, wet pack, or sponge, in abstracting heat from the body in fever, is generally looked upon as a recent therapeutic measure, and so indeed it is, if we regard the number of cases so treated; though the method has been known and written about since the beginning of the present century at least. Thus, as early as 1812, typhoid fever was treated by Récamier, in the Hotel Dieu, Paris, by the cold bath pure and simple, the patients being kept from fifteen to twenty minutes—two or three times a day—in a bath at from 68° to 70° F. All along from that time to the present, pamphlets and small works have been issued on the subject, the whole showing of which seems to be, that the mechanical abstraction of heat is a very valuable therapeutic procedure in cases of high temperature. In Germany, this method has been generally adopted for the past fifteen or twenty years. In England and America, the cold bath system proper has not been put into anything like general practice; while in France, the hospitals at Lyons are the only ones where the treatment is carried out as a system.

Dr. Thomas says, that "prolonged high temperature kills," and it has been stated and warmly advocated by good men in the profession, that the mechanical abstraction of heat by cold, gives the patient, suffering from intense fever a respite, and allows the physiological processes, or at least some of them, to go on for a time in an approximately normal manner. This seems reasonable, even though it is not stated that the undue formation of heat under the pathological process, whatever it may be, is checked, by the application of cold to the surface of the body. Certain it is, that an improved condition of the nervous system follows the use of the sponge or bath, and the patient frequently gets rest from the wearying delirium, and falls into a slumber which must be refreshing, and places him in a better position for recovery.

That the practice of applying cold outwardly has not been more universal, is probably due to the fact that there has been, and is, a prejudice in the minds of the laity, that cold applied to one suffering from fever, is a potent factor in the production of the untoward result we are so anxious to obviate. This old landmark which has been handed down from generation to generation still holds, and the general practitioner needs a deal of courage, who, especially in country practice, will order cold baths to be followed out systematically. If the patient live, it was in spite of the senseless treatment; if he die, the doctor certainly killed him by the use of cold. Such would be the almost unanimous verdict of the laity.

Now old landmarks are not to be despised, and the light of modern investigation shows that the cold water treatment is not, to say the least, an unmixed good; albeit, the ignorant opinion of the laity is entirely groundless from a scientific standpoint. They fear the patient will "take cold," a result not at all dreaded by the educated physician; and yet facts are now known, which go far to show that the cold bath treatment is not scientifically correct.

"Prolonged high temperature kills," not, it is believed, so much by the actual presence of increased heat itself, as by the *greatly increased activity* of the phenomena of the vital chemistry, upon which this heat depends. If this be true, and it seems to have been clearly demonstrated as true, then the aim should be, not so much to abstract heat, as to check its production.

From a series of observations made by the French scientists, Fredericq and Minquand, it has been shown that the application of cold to the surface "markedly augments the absorption of oxygen and production of carbonic acid, and consequently the production of heat."

This theory, namely, the increase of "intersti-

tial combustion under the influence of cold to the surface," is held by Liebermeister also, and is so stated by Niemeyer.

It would appear then, that by applying cold, we really increase thermogenesis in the "heat-producing area" of Rosenthal, while we are abstracting it from his "heat-losing area." This can not be correct treatment, scientifically; for it is simply taxing the power of the patient still further, than is already being done by the disease. Certainly a high temperature which is remittent, is "better supported than a low temperature which is continuous," and it is our duty to obtain remissions if possible. But if it be true that, by the cold bath treatment, we are increasing histogenesis and consequently heat, it were surely better to rely upon some of the chemical antipyretics, as quinine, antipyrine, or antifebrine. They give remissions of temperature, husband the patient's strength and check alterations in the tissues, such as fatty degeneration dependent upon high temperature, and slow the heart, thus improving the nutrition of the muscular walls of that organ.

THE FLESH AND MILK OF TUBERCULOUS ANIMALS AS FOOD.

In our last number we drew attention to the possibility of infectious disease being spread by domestic animals. Following that note, it will be of interest to our readers to peruse the following *résumé* of the results of investigations by French scientists, on the danger of using the flesh or milk of tuberculous animals, as food. The results were made known at a "Congress for the study of tuberculosis as it occurs in man and animals," recently held at Paris. Some of the most eminent men in France were present, and the whole subject of tuberculosis was dealt with, so far as science has gone in the investigation of that disease. Among those taking part may be mentioned Cornil, Verneuil, Villemin, Nocard and other well-known scientists. M. Nocard read a paper on the above subject, which is epitomized as follows, with the discussions thereon, by the Paris correspondent of the *Lancet*.

"It would appear to result, from his very ingenious experiments, that the muscles destroy or digest, as expressed by M. Nocard, the comma bacilli in such a way that the meat of animals affected with generalized tuberculosis presents but very little danger. Thus, four cats ate with impunity the flesh of a tuberculous cow, whilst a fifth cat that had eaten a lymphatic gland of the same cow succumbed in a very short time to experimental tuberculosis. M. Nocard, therefore, thinks that it is not necessary to exaggerate the precautions, or to hold Koch's bacillus in great dread, adding that one can eat without fear the flesh of tuberculous animals the tubercles of which are limited to the viscera and to the different lymphatics; even that of animals the tuberculosis of which is generalized, would be but exceptionally to be dreaded. As regards the milk, this should always be looked upon with some suspicion, and it should never be given to children without its having being previously boiled. Goats' milk may, perhaps, form an exception to this rule, as a tuberculous goat is looked upon as a pathological curiosity. At the meeting on the 26th, the question as to the dangers to which one is exposed by the use of the flesh and milk of tuberculous animals, and the means to prevent them, was discussed. A large number of the members took part in the debate. All acknowledged that the use of the meat, and particularly the milk, of tuberculous animals, should be regarded as dangerous. MM. Arloing, Galtier, Butel, Rossignol, and Aureggio would vote for the complete seizure of the meat of all tuberculous animals, instead of the partial seizure which M. Nocard judges sufficient. The foreign veterinarians present were all partisans of the entire seizure. M. Jorissenne claimed for the Belgian veterinarians the honor of having raised the question of the danger of the use of milk. He stated that of every one hundred cows, four are tuberculous. In one shed of twenty cows the milk was found to contain a prodigious number of bacilli furnished by tuberculous teats; he therefore insists upon the most radical measures. Mr. Robinson, of Greenock, does not believe in the distinction that is sought to be established between localised and generalized tuberculosis. Considering the danger shown by statistics, and the frightful proportion of tuberculous subjects among the human species, Mr. Robinson proposed that the most energetic means of preservation should be employed. He said that he came on purpose from Scotland to support these radical measures. All suspected meat should be seized. M. Dionis des Carrières stated that to the present day we have not had the demonstration of a single case of tuberculosis determined by the use of meat taken from a tuberculous animal. He asked why a substance only suspected should be rejected from the list of aliments. He suggested that, before adopting such radical measures, a series of experiments should be duly performed. With this view he proposed that the next criminal that may be condemned to death should be subjected during fifty days to a diet of

tuberculous meat, whereby the relation of cause and effect should be traced. M. Peuch, of Toulouse, showed the noxious action of the milk and the meat of tuberculous cows. The Congress voted, in principle, that the flesh of a tuberculous animal should be seized in totality. M. Hartenstein read a note on bovine tuberculosis in its relations to verminous phthisis (*phthisie vermineuse*). The author aften found in the lungs of oxen large pouches filled will caseous matter, closely resembling tuberculous masses. He observed that it is very important to know that these appearances are deceiving, as one has only to deal with dead parasites, and that the flesh of animals which contain them present no danger."

It was shown by M. Cornil that general tuberculosis may be produced through the mucous membranes. He introduced into the œsophagus of guinea pigs a few drops of tuberculous cultures, and always observed, in a few days, general tuberculosis, and this *without lesion* of the epithelium. It is therefore possible that tuberculous infection may take place from sexual intercourse when bacilli are introduced, a matter of great practical and scientific interest.

MEETING OF THE BRITISH MEDICAL ASSOCIATION AT GLASGOW, 1888.

This meeting was in every respect a success. Held in a city like Glasgow, one of the great centres of medical education in Great Britain and the seat of a famous University, it could hardly have been otherwise. The arrangements made for the general meetings and those of the sections were very complete. Canada was represented at the meeting by Dr. Geikie, of this city, who had credentials from the Medical Council of the College of Physicians and Surgeons of Ontario, and also from the Ontario Medical Association. Drs. Gardner and Stewart, of Montreal, were also present, and probably other members of the profession from various parts of the Dominion. The address of Dr. Gairdner, president of the Association, and Prof. of Medicine in the University of Glasgow, was very able. He showed what medical men and medical culture had been during past ages; how they had gone on improving from generation to generation, and what should be the ideal of a thorough all-round medical education, and the kind of mental training needed before entering upon purely professional studies, which will make these to be pursued with the highest degree of success.

The address in Medicine by Dr. Clifford Allbutt, of Leeds, was listened to with great pleasure by the large audience gathered to hear it, and will be read by thousands everywhere with satisfaction and advantage. Dr. Allbutt insists on a study of the history of disease, more careful than it has ever yet received. He points to heredity, as one field where rich harvests of knowledge will reward those who investigate fully and continuously this great department. To the geography of disease, special attention was also directed.

Sir George H. B. Macleod, Regius Prof. of Surgery in the University of Glasgow, delivered the address in Surgery. When the eminence of the speaker and his theme, "The advances of Surgery during the last half century," are considered, the reader may readily understand the address to have been most interesting. After large experience, Prof. Macleod favors anæsthesia by chloroform for operative purposes, saying of it, "that when properly administered, it is unrivalled." He touched upon hospital construction, the treatment of wounds of arteries, aneurism, ununited fractures, lithotrity and lithotomy, and too many other subjects to be even mentioned in a single brief notice, and every subject dwelt on was treated in the clearest and most practical way. His address will well repay a very careful perusal.

We can only mention a most important paper by Dr. MacEwen, on "The surgery of the brain and spinal cord." It shows how surgeons can now diagnose cerebral cases, and how operations on the brain may not only be safely undertaken in many cases, but that they are often imperatively demanded for the saving or prolongation of life. This address showed, too, with what advantage operative procedure can be employed in certain cases of spinal injury, where paraplegia results from pressure of portions of the vertebral laminæ on the cord.

The address in Physiology, on "The gaseous constituents of the blood in relation to some of the problems of respiration," by Prof. McKendrick, was also very masterly, and is deserving of a careful perusal.

Dr. More Madden, in his address in the "Obstetric" section of the Association, gave a *résumé* of the progress made in obstetrics and gynæcology.

His reference to the frequency of the occurrence of chronic inflammation of the Fallopian tubes, and the ovaries, and to the fact that these are often amenable to treatment, and may end in recovery without any special means, is of practical interest. Dr. Madden speaks of the value of aspiration in certain cases where the Fallopian has become distended.

In addition to an address by Sir William Aitken on "Pathology" and how it should be pursued, and one by Dr. Cheadle in the section devoted to the Diseases of Children, there was a great deal of good work done; many most valuable papers read, many cases exhibited of very great interest, and much shown in the way of anatomical and pathological preparations which will be long remembered by those who had the good fortune to be present. The British Medical Association is a body of which the profession may well be proud; and while our Ontario Medical Association is perhaps too large to become a mere *branch* of the great British organization, it might serve a good purpose if some kind of affiliation could be brought about, so as to unify to a greater extent than at present, the profession in Britain and in our large and progressive Province of Ontario.

THE CANADIAN MEDICAL ASSOCIATION.

The Twenty-first Annual Meeting of the Canadian Medical Association took place in Ottawa on the 12th and 13th, and was attended by fair success. There was a good attendance of medical men from the Province of Ontario; one from the far West, and, of course, a strong contingent from Montreal, and a few others from the Province of Quebec. The Maritime Provinces were not represented as they should have been, and the French Canadian element was all but conspicuous by its absence. Why our French-Canadian brethren cannot become possessed with enough professional enthusiasm to bring them out to the support of those who are trying to advance the best interests of the medical profession, is always a mystery to us, but we sincerely hope it is not too late to ask for their hearty co-operation in an endeavor to perfect an organization which is of great national, as well as scientific importance. Although the meeting just concluded was successful, yet we may hope for still greater success in the future, and we would remind our readers that the Canadian medical profession are, in a great measure, judged by the work of the Canadian Medical Association, and with other countries working with such diligence and energy to advance the profession, it will tend materially to our detriment, unless a more hearty support be given to this Association. There are some of the best medical men in the Dominion who never attend such meetings, and they are certainly derelict in their duty towards the younger members of the profession, more particularly.

Next year, the Association has decided to meet in Banff, B.C., and it is to be hoped the various members of the profession throughout the Dominion will begin now to make arrangements for an enjoyable excursion to that portion of Canada which, to many of us here, is a country whose beauty and extent are but imperfectly realized.

The profession of Ottawa did that city credit in their boundless hospitality, and established in the minds of those who attended the meeting a remembrance not soon to be forgotten. The banquet given in the Russell House in the evening was well attended, about fifty being seated at the table, and the fact that each paid his own footing did not in any way decrease from the attendance. The President of the Association occupied the chair with excellent grace and ability. Sir James Grant surpassed all his former eloquent efforts in a speech on "Medical Literature," which would do credit to any company. Old college songs were heartily joined in by those whom the convivial spirit of the hour carried back to their college days, and with the early hours of the succeeding morn, with the singing of "Auld Lang Syne," the links of friendship's chain were again rewelded.

Remedy for Erysipelas.—Nussbaum writes as follows (*Al. Wein. Med. Zeit.*) regarding erysipelas. "I have had the pleasure recently to obtain rapid cures in many cases of erysipelas by a very simple method, which does not present any danger, nor occasion any pain; which is not the case in injections of phenic acid, which are almost always cruel on account of the suffering.

"The erysipelatous parts, previously rubbed with a pomade of equal parts of lanoline and ichthyol are enveloped in salicylated cotton. It will be found, the day after this application, that not only has the erysipelas not advanced, but that there

has been a notable amelioration in all the morbid symptoms. The roughness, the redness, and the pain have very much diminished—in a word, all the phenomena of irritation have disappeared as if by enchantment, to return no more. It is hardly ever necessary to contine the application for more than three days."

SULPHUROUS ACID FUMES FOR WHOOPING-COUGH.—Lately we called attention to the fact that whooping-cough may be cured by the fumes of burning sulphur. Experience seems to show that this is not a fad, but a reality. Numerous paragraphs, scattered through the medical journals, attest to the efficiency of this treatment in what has heretofore been looked upon as an incurable disease. Dr. Manby, *Pract.*, believes that if Mobin's method were generally carried out for six months, the disease would be practically exterminated. At any rate, the troublesome and chronic nature of the complaint should make all hail with delight the successful plan of treatment suggested by Mobin, which is as follows: The children are, in the morning, put into clean clothes and removed elsewhere. All their clothes and toys, etc., are brought into their bedroom, and sulphur is burnt upon a few live coals in the middle of the room. The fire is allowed to remain in the room for five hours, and then the windows and doors are thrown open. The child sleeps in the room the same evening. About twenty-five grammes (a little under an ounce) of sulphur to every cubic metre may be burnt; this is equivalent to rather more than ten grains per cubic foot. The room is fumigated in a like manner during the night—the children practically living in an atmosphere of diluted sulphurous-acid gas for some days, while in several cases the process is repeated at the end of the week.

THE PROFESSION AT JACKSONVILLE.—The following is from the New York *Sun*, and shows that the heroic action of the medical men of the plague-stricken district is appreciated:

"The whole country has observed with admiration the heroic conduct of the physicians who are battling with the yellow fever in the stricken city of Jacksonville. They have not only remained at the post of duty in the presence of danger, rendering services freely to the needy, but they have striven to surpass each other in deeds of devotion and self-sacrifice. Several of them have fallen victims to the plague during the past two months, and one of the most grievous incidents reported from Jacksonville is the death, on Monday last, of Dr. W. L. Baldwin, who caught the disease from one of his patients in the hospital. Not a few doctors, practising in different parts of the country, have gone to Jacksonville to render relief to the distressed people, and hundreds of others have nobly offered to follow their example. Truly such physicians are worthy of honor and gratitude from mankind."

REMARKABLE TEMPERATURE.—The following remarkable record was handed to us by a friend last month and is the production of a "doctor." We reproduce it *verbatim et literatim.*

"Dear Doctor our little patient is doing quite well! does not appear to be any worse than when you was here—the bowels some Tympanic moved once yesterday; some murmering this morning, drank 2 table spoonfuls of milk, being the only food—yesterday morning at 4 oclock pulse 98 Resp 29—Temp 109 at 2 P. M. pulse 102 Resp 29 Temp 112 at 8 P. M. pulse 120 Resp 27 Temp 121 at 7.20 this morning the pulse 112 Resp 28—Temp 112—I have kep her on Quinine as per Scrip when the fever was low, and the aconite when fever; I added a little Syr Epicac. all appears as favourable as could be expected: any sugestion or any further treatment you think proper let me know let me hear from you. Dr——"—*St. Louis Med. and Surg. Jour.*

ARTIFICIAL RESPIRATION IN NEW-BORN INFANTS.—Mr. Jennings, writing to the *Lancet*, says, regarding a new method of producing respiration in a new-born infant: "Place the infant on its back, feet towards you, with your hands sling-like beneath its body, about midway, the thumbs in front round the thorax. Now raise your hands a few inches upwards, so that the body becomes arched by the extremities falling on either side. Do this lifting about fifteen or twenty times in the minute, keeping the body in the upward position for a short period each time. In lowering the body, apply gentle pressure by squeezing the thorax with your hands and thumbs. One important point in this method is, that both mouth and glottis are opened, and any fluid in the trachea or lungs is

able to flow out. I have found this means of producing artificial respiration successful on several occasions, and in one case where Marshall Hall's method had failed."

Ratio of Insane to Sane Persons.—The following *(N.Y. Med. Jour.)* will be interesting and no doubt surprising to members of the profession who are not alienists:—In 1860 the ratio of the insane among the colored people was one in every 5,799, and in 1880 one in 1,096. The doctor quotes Bucknill and Tuke to the effect that the maximum ratio of insanity coincides with the maximum point of civilization, and intimates that possibly the ratio among the blacks may never equal that among the whites, one to 500. According to the census of 1880 there were 6,165 colored people insane in the United States.

The Microbe of Cancer.—Dr. Lampiasi-Rubino, says *The Med. Rec.*, has been studying the micro-organisms present in various neoplasms, and comes to the following conclusions: 1. In malignant growths, epithelioma, sarcoma, scirrhous and encephaloid carcinoma, there is constantly found a specific bacterium distinct from all other pathogenic micro-organisms. 2. This microbe is not found in benign tumors like fibromata or lipomata. 3. The micro-organism causes a general infection, and often death in the lower animals. 4. It is probable that the production of malignant neoplasms, and of the general carcinomatous cachexia following them, depends upon the presence of this micro-organism.

Salicylic Acid in Metrorrhagia. — This remedy has been found to arrest the flow in two cases (Felici *Lancet)* in a very short time. In one case of carcinoma which had resisted all ordinary styptics, a plug of carbolized cotton wool, soaked in a solution of salicylic acid, completely arrested the hæmorrhage in a few moments. The other case was one occurring at the menopause. It was so severe that the patient was collapsed. A dossil of cotton wool soaked in a concentrated solution of the acid, and introduced into the uterus on a sound, was successful in checking the hæmorrhage in a few seconds.

Urticaria in Infants.—Dr. Deligny recommends *(London Med. Rec.)* the following ointment: R.—Chloral hydrar., pulv. camphor, pulv. gum. acaciæ, āā 4 parts; ung. simplex, 30 parts. Rub the first three substances together until liquefaction occurs, and then add the simple ointment. Apply each evening. This combination calms the itching, allows the child to obtain sleep, and does away with the scratching which gives rise to such distressing effects in this disease. In the morning the skin should be anointed with a one per cent. mixture of carbolic acid in glycerine of starch.

Tonic and Alterative for Children.—The syrup of the iodide of iron, says Jacobi in *Arch. of Ped.*, is well tolerated by the youngest infants; as many drops as the baby has months may be given three times a day, up to eight or ten drops a dose. It is well tolerated by the stomach, in which the iodine is freed from the iron and acts as an antifermentative. Besides, experience appears to confirm the theoretical inference that it proves its power as an absorbent in cases of anæmia complicated with glandular enlargements.

Antipyrine in Labor.—This drug is said to relieve the pains of labor in a marked degree. It has been used in doses of fifteen or twenty grains, per rectum, with the happiest results. M. Queirel *(Med. Rec.)* says he administers it subcutaneously, in five grain doses, which may be repeated in two hours. It usually greatly relieves the pains, while not interfering with the regularity or strength of the contractions.

Threatened Abortion.—Dr. W. Snidley, in the *Cal. Pract.*, treats threatened abortion by the administration of 15 to 30 gtt. doses of fl. ext. ergota every 4, 6, or 8 hours, so as to stop the hæmorrhage, and not produce too much contraction of the uterus. At the same time, he gives morphine ⅛ to ¼ gr., to keep the uterus quiet, and absolute rest in bed.

Whooping-Cough.—Dr. W. O'N. Mendenhall, in the *Med. Reg.*, states that he has had excellent results from the use of the following in whooping-cough:

R.—Ac. carbolici, ... fl. ♏v.
Glycerini (pure), ... ℥j.

Sig.—℥j., every 3 or 4 hours for a child 10 years old.

DYSMENORRHŒA.—The *Am. Med. Digest* gives the following as useful in dysmenorrhœa :

℞.—Tinct. aconit. rad., ... ♏ xx.
Morphiæ sulph., ... gr. j.
Ext. cimicifugæ, ... fl. ʒ j.
Ext. ipecac., ... ♏ xx.
Elix. simp., ... ʒ jss.
SIG.—ʒ j every two hours.

PRURITIS PUEDENDI.—Dr. A. Routh (*Br. Med. Jour.*) speaks very highly of the following lotion in pruritis puedendi of neurosal form, especially in the reflex pruritis which often accompanies pregnancy :

℞.—Borax, ... ʒj.
Boiling water, ... Oj.
Ol. menth. pip., ... gtt. v.
Shake well and bathe the affected parts freely with a soft sponge.

HÆMORRHAGE.—Dr. Huchard (*Therap. Monat.*) recommends the following prescription to arrest hæmorrhage :

℞.—Ergotin,
Quin. Sulph., ... āā gr. xxx.
Pulv. fol. digitalis,
Ext. hyoscyanni, . . . āā gr. iij.
Ft. pil. No. xx.
Sig. 5 to 8 to 10 pills daily.

CHRONIC ACNE.—The *Lyon Méd.* gives the following :

℞.—Resorcin,
Pulv. amyli,
Zinci oxidi, ... āā ʒj.
Ung. petrolei, ... ʒiij.—M.
S.—To be carefully applied at night, and removed in the morning by means of wadding saturated in olive oil.

CHRONIC PHARYNGITIS.—This troublesome complaint, may be cured (Eneler, *Berlin Klin. Woch.*) by the following gargle :

℞.—Zinc sulph., ... gr. xv.
Ag. menth. pip., . . . fl. ʒ v. Mj.
S. Use as a gargle 4 times a day.

PAY YOUR SUBSCRIPTION.—An exchange relates this parable : "A revivalist requested all in the congregation who paid their debts to rise. The rising was general. After they had taken their seats, a call was made for those who did not pay their debts, and one solitary individual arose and explained that he was an editor, and could not pay because all the rest of the congregation were owing him their subscription to his paper."

MIGRAINE.—The *Am. Prac. and News* says that Cannabis Indica is highly useful in the treatment of migraine, not only as a palliative, but as a curative agent. One-third of a grain of the alcoholic extract in pill form should be given every night, or night and morning, which may be increased to one half or two-thirds, and should be continued for several weeks.

MASTITIS.—In the Columbia Hospital for Women *(Obs. Gazette)*, a liniment composed of half an ounce of camphor, dissolved in three ounces of turpentine, has been found most effective in checking the secretion of milk in mastitis ; it alleviates pain, lessens induration, and is more effective in reducing inflammation than any other remedy that has been tried.

EUREKA.—Dr. W. H. Oliphant read a paper on Minor Surgical Cases, at the late meeting of the Canadian Institute of Homœopathy, says the *Med. Counselor*, "In which were included four cases of cancer cured by internal medication, coupled with external application of thuja."

ANÆSTHETIC.—Sir Spencer Wells (*Br. Med. Jour.*) prefers the bichloride of methylene to any other drug, for anæsthetic purposes, as it is safer and equally good as an anæsthetic.

WATER IN THE STOMACHS OF DROWNED PERSONS. —It has been proved by the experiments of Obolovsky, that water found in the stomachs of persons found drowned, does not prove absolutely that death took place by drowning, as water may enter the stomach after death.

DR. BELL, of Glasgow, considers the uterus, in the large majority of cases, the source of the mischief in a great many of the affections to which the tubes and ovaries are liable, and, therefore, averts these evils by suitable treatment of the uterus. Iodized fennel gives the best results, being aseptic and antiseptic in the highest degree. Carbolic acid exercises a powerful anodyne effect on the endometrium, and has powerful alterative

properties. In long-standing endometritis, the granular condition of the mucous membrane should first be removed by the curette.

It is said, *Med. Reg.*, that "Chloride of lime spread on the soil near plants will protect them from insects or vermin. Dusting over the leaves of plants with a solution of the chloride will keep all insect plagues at a distance."

Dr. Walker, of Dundas, sailed for England on the 25th ult. He intends to spend the winter in studying and practising under Lawson Tait. He will on his return open a sanitarium in Toronto, similar to the one he has lately conducted in Hamilton.

Dr. J. W. F. Ross, of this city, lately left for Europe, where he intends taking a special course in gynæcology, preparatory to making that department of medicine a specialty on his return.

Professor to medical student—"How would you treat post-partum hæmorrhage?"

Student—"I would tie the post-partum artery."

That student is now carrying the hod.—*Med. Reg.*

It is said that 15 grains of antipyrin, taken in the morning and repeated in an hour if necessary, will often quite relieve the distress of hay fever.

Wanted, a copy of Bright's Medical Cases, for which a good price will be paid. Address, Editor Lancet.

Bartholow regards the bromide of lithium as almost a specific in muscular rheumatism.

Books and Pamphlets.

Therapeutics: its Principles and Practice, by H. E. Wood, M.D., LL.D., Professor of Materia Medica and Therapeutics, and Clinical Professor of Diseases of the Nervous System in the University of Pensylvania. The Seventh Edition, rearranged and enlarged. Philadelphia: J. B. Lippincott Company. Price $6.00.

It is with great pleasure we refer to a new edition of this very excellent treatise on therapeutics. In this, medicines are grouped in accordance with their known therapeutic actions, and such action thoroughly and scientifically explained. If we speak of one portion of this work in preference to another, we would particularly commend the chapters on depresso-motors, and also the one on Cardiants. We can truthfully say these chapters in themselves mark an era of great advancement in therapeutics. To read this work carefully is to obtain a clear and scientific basis upon which all medical treatment must rest. This work cannot but meet with commendation wherever it is received, nor can any practitioner be without it who desires to be abreast of the times.

Manual of Chemistry:—A Guide to Lectures and Laboratory Work for Beginners in Chemistry. A text-book specially adapted for Students of Pharmacy and Medicine. By W. Simon, Ph.D., M.D., Professor of Chemistry and Analytical Chemistry in the Maryland College of Pharmacy, Baltimore, Md. Second edition, enlarged and illustrated. Philadelphia: Lea Brothers & Co.

This is a commendable treatise on chemistry, in which the author has treated the subject in a most concise and practical manner. The characters and methods of obtaining the precipitate tests are especially well treated, and the chapter on Examination of the Urine is especially good. We can recommend this treatise very highly.

Excessive Venery, Masturbation and Contisence. By Joseph W. Howe, M.D., late Professor of Clinical Surgery in Bellevue Hospital Medical College, etc. New York: E. B. Treat.

This little work deals with the etiology, pathology and treatment of the diseases resulting from veneral excesses, and is useful in that it treats in a clear and practical manner that field of practice which is so often avoided by the respectable practioner, and as often scandalously utilized for the benefit of the quack. The work is a very creditable one.

The opening lecture at Trinity Medical College will be delivered on Monday 1st inst., by Rev. Dr. Johnston, of Jamaica. Toronto University Medical College opens the same day, Dr. Richardson occupying the rostrum; while the Women's Medical College will be opened on Tuesday the 2nd, Dr. Powell giving the opening address.

Births, Marriages and Deaths.

At Millbank, Sept. 11th, Dr. R. Whitman, of Shakespeare, to Kate, only daughter of Mr. Jacob Kullman.

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CYSTITIS.*

BY W. BRITTON, M.D., TORONTO.

Idiopathic acute cystitis is rarely observed, excepting as a complication of some pre-existing malady. It is said to originate *de novo*, occasionally, in scrofulous and rickety girls in whom there is manifest a predisposition to vaginitis and other varieties of mucous inflammation. It is found as a complication of pyæmia, typhus fever, and in certain cases of the exanthemata. The gouty and rheumatic diatheses are said to be predisposing causes; although, if cystitis be in progress and a fit of gout supervene, the consequent diminution of uric acid excretion is thought to allay temporarily the bladder symptoms.

Primary acute cystitis, with the few exceptions mentioned, is probably always a traumatic disease, although the injury is often inflicted in a secondary manner. Of the direct injuries may be mentioned, calculus, lithotomy and lithotrity, the unskilful use of the sound, external blows (especially when the bladder is much distended), the prolonged pressure of the fœtal head and some of the mechanical aids to delivery; the irritating effects of ill-advised or too free use of such articles as the balsams, turpentine and cantharides may be included in the category.

All the indirect causes of traumatic cystitis may be narrowed, in their *modus operandi*, to the two elements of over-distention and retention of urine —apparently one and the same thing, but widely diverse in the transition from cause to effect. Over-distention means unnaturally violent efforts to expel and consequent hyperæmia, while prolonged retention is the forerunner of urinary decomposition and irritation — that indefinable something that is said to underlie the inflammatory process.

The causes of retention may be summed up as follows:—Congenital or acquired narrowing of the meatus, and tumors of that aperture such as frequently are found in the female; stricture, prostatic disease, especially if accompanied by hypertrophy; a calculus lodged at the neck; and atony and paralysis of the bladder, a not uncommon trouble of old people, and a complication of various forms of spinal lesion. In a subacute form, cystitis often occurs at the climax or towards the close of an attack of gonorrhœa; and, indeed, in the female, the almost constant existence of urethritis and its inclination to invade the bladder, are set down as some of the diagnostic features of specific, as distinguished from simple vaginitis. Inflammatory diseases of any of the neighboring organs may, by extension, invade the bladder; but this pertains more especially to its peritoneal covering.

Usually the disease invades primarily the mucous tunic, occasionally the peritoneum, and if it ever attacks the muscular coat, it has its starting point in one of the other two—commonly the innermost; and, indeed, this order of origin is not difficult to account for when the structure and functions of the bladder are taken into consideration. An eminent pathologist says that two-thirds of the diseases to which human kind are subject have their starting point in mucous membrane, so sensitive are its delicate cells to irritation; and in this particular instance we have to deal with an organ which is at once a receptacle for, and an instrument of expulsion of, a fluid ever varying in character and quantity according to the protean conditions of the system and its surrounding influences. It is protected from undue irritation in part by that normal vital principle that exists in healthy tissue, and in part by the constant secretion of a protective mucous coating, normal in quantity and character; it should not be distended beyond what its muscular fibres can bear without weariness; and, when expulsion occurs, exit should be so unobstructed as to necessitate only such a subdued contraction as is necessary for dilation of the outer portions of the urethra; unless it be shown that the longitudinal fibres assist also in opening the sphincter. Any wide divergence from

* Read before the Toronto Medical Society, Oct. 16, 1888.

health in the condition of the urine, especially if from retention; an abnormal quality or quantity of mucus, or want of harmony between the sets of muscles concerned in urination may, separately or conjointly, bring about a state of irritation which, sooner or later, is followed by hyperæmia; and Rindfleisch says that disordered and hypersecretion are the concomitants of hyperæmia, and that this hyperæmia is a proximate cause of the mal-secretion; also the more or less remote cause of other disturbances, viz., tumefaction, hæmorrhage, pigmentation, hypertrophy, etc., which, taken together, constitute the anatomico-pathological picture of catarrh of mucous membranes.

It may be asked, why should undue contraction of the muscular wall of the bladder induce congestion of the lining? The returning venules, as they pass through the muscular coat, are surrounded by a much thinner coat of connective tissue than the arterioles, and are, therefore, in more immediate contact with the muscular fibres; in consequence of this anatomical arrangement, inordinate contraction compresses the veins more than the arteries; hence the passive hyperæmia of the mucous coat, induced by such violent efforts as the bladder perforce must make to overcome all sorts of obstructions to the urinary flow. The same result naturally follows those spasmodic contractions that are excited by the presence of calculus and tumors.

As in other mucous membranes the acute attack may be catarrhal or croupous in character; this latter, the form usually excited by cantharides and other irritants introduced into the system; and may end in resolution, ulceration, suppuration or gangrene, or may degenerate into the chronic form. After the inflammatory process is once set up, not simply the superficial layers of cells, but all the elements of the mucous membrane appear to be involved; and, indeed, one pathologist maintains that the trouble lies not in the mucous tissue alone, but in the underlying layer of connective tissue, so universal is the invasion. At any rate every cell is changed, if not in form, at least in character and ability to withstand undue irritation; therefore, even after the urine is restored to a healthy condition, the mucous secretion normal, and all symptoms have disappeared; for a considerable period of time, there must still remain a *locus minoris resistentiæ* and danger on slight provocation, of re-excitement of the disease; this interval lasting until a new generation of cells is formed throughout. Hence, also in part, the tendency towards chronicity.

On examination, the mucous membrane is found discolored and softened—seldom universally, but usually in patches, which occur most frequently in the vicinity of the neck. Here and more may be erosions; or, if the disease has run very high or lasted long, there may be ragged ulcers laying bare the muscular fibres, or even gangrenous spots; although these last seldom are seen, excepting in the aged and debilitated, or as the result of severe traumatic causes. The spots of discoloration and erosions are mostly to be found on the rugæ, and may be covered with ropy mucus, sanious offensive fluid, or may be invaded in part by croupous membrane—this often is coated with phosphates. Rindfleisch says, that this croupous membrane, although it has the gross appearance of being fibrous in structure, really consists of corpuscles which have assumed a change of outline; the protoplasm having arranged itself in an irregularly radiating form by the corrugation of the cell, so that an agglomeration of the cells gives to the neoplasm the appearance of being made up of fibres. Occasionally it happens that the ulcers spoken of extend and cause perforation, which fortunately does not in every instance prove fatal, as the surrounding zone of inflammatory action may bring about adhesions to neighboring viscera.

The disease in the acute form is usually ushered in by malaise and chills, with frequent desire to urinate, followed by high temperature and the general symptoms of fever. The pain at first is not severe unless the peritoneum is involved, but considerable uneasiness is complained of in the hypogastrium and the perineum, perhaps in the glans penis and shooting down the thigh. If the anterior wall is the part chiefly involved, which is rarely the case, tenderness on pressure is felt a good deal in the hypogastric region; but, as the inflammatory process is ordinarily confined to, or greatest, near the neck, the perineal and perrectal tenderness are usually found to be the greatest. In these last cases the vesical irritability is more marked.

The chief symptoms complained of are irritability, straining and scalding in the urethra as the urine flows in small quantities, and in case

the *bas-fond* is much involved, there may be some tenesmus, which, in one case, I saw extreme. The pain and uneasiness are alleviated after urination and commence again as soon as urine accumulates, the interval of rest being shortened according to violence of the attack, and the closeness of the inflammatory process to the neck of the bladder.

Should resolution set in, these symptoms gradually subside and nothing is left but a condition of occasional irritability, which, as already stated, ends when there has been time for the formation of a new set of mucous elements. But should the inflammation continue, ordinarily, in two or three days, the urine is changed much in character; it is ammoniacal, and contains large quantities of mucus, also pus corpuscles and occasionally blood globules. Ammonio-magnesian phosphate is found plentifully and is recognized by the microscope; carbonate of ammonia and amorphous phosphate are present, as also occasionally sulphuretted hydrogen in small quantities. The sediment forms quickly with the pus in an opaque yellowish layer on top, and the clear supernatant fluid having often a yellowish tinge. Later on, if the disease pursues a severe course, the urine assumes a darker color, caused by the disintegration of the blood corpuscles by the carbonate of ammonia, and has a highly ammoniacal and fetid odor.

How the urea becomes converted into carbonate of ammonia does not appear to be decided. There exist two or three theories in the matter. Dr. Rees thinks that secretion being abnormal, on account of diseased and hyperæmic mucous membrane, this degenerated mucus acts as a ferment. Others suppose that some hitherto undiscovered ferment enters from the blood, while it is imagined by the majority of observers that bacteria play an important part in the process I heard of an incident that occurred before much deference was paid to the pranks of these little bodies, that bears somewhat on this matter. In the good old days, when the rite of initiation, with all its mysteries, was a *sine qua non* in a certain medical school, one of the impressive ceremonies in the chamber of horrors was the passing of the catheter, ostensibly to investigate the physical competency of the aspiring but timorous candidate. This delicate operation was, I suppose, relegated to the most experienced of the inquisitors, and I believe the instrument used was the gum elastic; therefore it is likely that no undue violence was used towards the victim. The inference was that he had been continent, at least there was no stricture, and the catheter entered the bladder easily; but a magnificent sample of cystitis was the result. Of course it is barely within the limits of the possible that some member of that august tribunal may have had an attack of gonorrhœa, and hence the consequence. But at any rate, Niemeyer records cases where the introduction of a dirty catheter has resulted in inflammation. The presence of pus or blood is easily recognized by the microscope and by the tests for albumen.

Coulson says that it is almost impossible to distinguish the corpuscles of mucus from those of pus; that it is probable that epithelial cells become transformed into pus corpuscles, and that the latter are spherical, granular on the surface, and have divided nuclei. Occasionally shreds of false membrane are voided with the urine, and cases are recorded where obstinate retention, caused by large sheets of detached membrane, has rendered cutting operations necessary. Should the case progress unfavorably, the condition of active sensibility to pain passes eventually into a *quasi* typhoid state, manifested by hebetude, subsultus, obstinate vomiting and purging, and ends fatally by way of coma.

There may be contraction of the bladder; but, as a rule, towards the end, if unrelieved by the catheter, sensibility being lessened, the bladder is allowed to dilate to enormous proportions. In the majority of these cases the disease has affected the ureters and pelves of the kidneys; and, as a consequence, the secreting structure of the kidney itself; so that the tubules are often dilated, the cellular elements atrophied, cysts may be present and the capsule adherent.

As a rule an uncomplicated case of cystitis is easy of diagnosis, but it is comparatively easy to overlook some of the diseases that bear a causative relation to it. The limits of this paper will not allow a full discussion of the distinguishing features of these different maladies; but a mere enumeration and brief reference to the salient points of contrast will suffice.

Diseases of the urinary tract, all the way from a diseased meatus up to nephritis, may be accompanied by pain; and, with few exceptions, more or less of this takes the form of irritability of the

bladder and is referred to its neck, hence the location of uneasiness alone should not be relied upon in forming a diagnosis. The abundant deposit of phosphates, such as occurs in debilitated states, can easily be distinguished from pus or mucus by the addition of nitric acid and the use of the microscope; in addition to this there would be absence of all the urgent symptoms of acute cystitis. Pyelitis, unless the ureter is blocked up, is productive of a copious sediment of pus; but, unless the bladder be involved, the urine when first voided is probably acid in reaction, instead of alkaline, as happens in those advanced cases of cystitis, accompanied by abundant pus formation; further, the albumen test will show much more cloudiness in proportion to the sediment, because the foreign element in pyelitis consists chiefly of pus not supplemented by mucus and phosphates.

Should structural changes take place in the substance of the kidneys, as usually occurs sooner or later in pyelitis, tube casts will be found. Neither will the vesical irritability be so great as in cystitis. Prostatitis, especially if leading to abscess, may closely simulate cystitis, but the distinction may be made by palpation through the rectum.

Calculi, though often productive of cystitis, may exist without it and cause many of its symptoms; but stone in the bladder, as a rule, has less scalding in the urethra, more frequent and copious hæmaturia, and the pain is greatest just after urination, while that of cystitis is temporarily relieved by it. In doubtful cases the sound settles the difficulty, unless the stone is encysted.

Simple irritability of the bladder arising from prolonged exposure to heat or cold, diuretic medicines, drastic cathartics, hysteria, neuralgic diathesis, or disease of neighboring organs as hæmorrhoids or prolapsus-uteri, is not likely to be mistaken for cystitis; for the attack is usually transitory, perhaps periodical, and the painful symptoms are the only ones observed.

In regard to treatment of the acute form in its early stage, the indications are all in the direction of the antiphlogistic. Rest absolute, for the patient, and as complete rest as can be secured for the inflamed organ—that is, saline cathartics to lessen the blood current and urinary flow—opiate suppositories to allay irritation, hot fomentations and counter-irritants, excepting the cantharidal; demulcent drinks, in moderately small quantities and milk diet. Hot baths are very serviceable, and, if the urethra and neck of the bladder are not so sensitive as to make it difficult and very painful, it is much better to anticipate the excessive contraction caused by distention by the use of the catheter, and for obvious reasons a soft rubber is the preferable; for, as has been said, the spasmodic contraction induces hyperæmia of the mucous lining, causes still further perversion of its secreting function and so aggravates the malady.

As the urine is often highly acid in the early stage, the alkalies would be indicated; and in the later stages benzoic acid to counteract alkalinity. various specifics have been praised—notably buchu, hyoscyamus, uva ursi, lupulin, cubebs, copaiba, and belladonna. Gross thinks copaiba in small and often repeated doses one of the best, if not the best remedy; and, as he thinks that a combination of remedies in this particular disease better than any one individually, he combines the copaiba with, I think, uva ursi and hyoscyamus.

I found in one case the capsules of copaiba, cubebs and santal wood apparently act well. I believe this fondness for copaiba did not originate with Gross, for Sir Astley Cooper used it extensively for the same disease.

Should the collection of mucus and pus be so great as to interfere with free urination, or should there be enlarged prostate with consequent permanency in the depression behind it, it would be necessary to use irrigations, which will be mentioned in connection with the chronic form of the disease. Of course when inflammation of the bladder is a result of other diseases, the cause must be removed if possible; otherwise the cystitis remains.

Time will not permit of discussing the chronic form of the disease, further than to say, that of course it is characterized by less pain; enormous quantities of sediment, consisting of ammoniomagnesian phosphates, mucus, pus, phosphate of lime, and often urate of ammonia; is apt to lead to extensive ulceration when it is considered incurable; may be lighted up into the acute form, when there will occur more pain and less sediment until the acute stage passes off again; and is liable to produce hypertrophy of the bladder, seldom concentric, ordinarily eccentric. It may last for

many years in a mild form occasioning only a little inconvenience; or it may, by invading the kidneys or by the constant discharge and pain, so undermine the strength as to lead to a fatal termination.

Prof. Berkeley Hill says, "the chronic form is eminently curable if the cause be removed and the kidneys are not affected. Even if the cause remain and the bladder is free from ulceration, the affection may be palliated sufficiently to prevent suffering and the shortening of life"—a pretty sweeping statement when the long list of remedies, is made up, each of which has a sponsor who vouches for its infallibility.

The diet, of course must be unirritating, and proper rest must be enforced. The same rules respecting the use of the catheter will apply as in the acute disease, and I conclude, from the published convictions of many and from my own experience, that irrigation properly conducted is of more service than internal medication.

Of the remedies recommended to be taken are, in addition to those already mentioned, tannin, nutgalls, tincture of the chloride of iron, Venice turpentine, compound tincture of benzoin, benzoic acid, and acetous extract of colchicum; this last indicated in the gouty habit. Care should be observed in the administration of belladonna, especially to old subjects, as an excess of the drug is apt to paralyze the detrusor urinæ; thus, while allaying irritation, doing more harm than good.

Irrigation is best done by gravity—a syringe is uncertain in its force, while gravity is constant—and may be simple or medicated. I have tried several of the remedies for irrigation and have thought that boiled water was followed by less irritation than any of them, in one case, at least.

From the time of Sir B. Brodie down to the present, a ¼ gr. to the ounce solution of nitrate of silver appears to have been the favorite, and is said to lessen the quantity of mucus, also the phosphates. I shall simply mention the others:

Permanganate of potash, or carbolic acid, if there is fetor. Heath prefers quinine and dilute sulphuric acid, if there be much pus and ammonia. Devergie used balsam of copaiba, with opium or belladonna in barley water. Either boracic acid, borax, or zinc sulphate is recommended, if there is simply an excess of mucus without other change in the urine.

So much has been said of late of the desirability, in obstinate cases, of opening into the bladder for the purpose of draining, that an expression of opinion from the members, on this point especially, would be interesting; for, at the very best, it is usually an intractable disease to manage. I had intended to narrate two or three cases bearing on cystitis; but, as the paper has unintentionally grown already too long, I shall only relate the particulars of a case in which an accidental complication brought about a cure, and made it self-evident, in this particular instance, that any means that can be devised for the constant drainage of the bladder, without the apparatus proving in itself a source of irritation, will solve the problem, how best to keep this organ, when inflamed, in a state of perfect rest. Such being accomplished, a case of persistent cystitis, unless the cause be irremovable, would be a curiosity.

Several years ago I attended in labor Mrs. F., a healthy Englishwoman. The fœtal head was abnormally large; and, although the pelvis was well shaped, the labor was severe and slow. I tried the forceps—perhaps I used too much traction and too little compression, or perhaps, in my short-sightedness, I misapplied the instruments; at any rate, they slipped, but did not cause any observable external injury, and, luckily for my reputation, as I was then a new beginner and could not have survived many lacerations of the perineum, I then performed version, and without much difficulty. Everything went well until the third day, the urine being voided normally, when to my horror, symptoms of acute cystitis set in, which became aggravated for a day or two, when the strangury suddenly ceased, and the urine escaped per vaginam. I introduced a small sound into the bladder, and by conjoined digital examination, found that a very small vesico vaginal fistula had formed.

By this time, symptoms of endometritis of rather severe character began to appear. Consequently, I was obliged to let the bladder take care of itself, which it did beyond my most sanguine expectations; for while I had to meet the vaginal irritation excited by the occasional urinary trickling, after the uterine trouble disappeared, the cystitis gradually improved; and to cut the story short, the treatment consisted simply in keeping the patient on the side, the occasional application of nitrate of silver to the fistula, and the use of th

catheter, together with antiseptic irrigation of the bladder; in about six weeks the fistula closed and the cystitis disappeared.

As this occurred in the neighborhood of ten years ago, and there have been no bladder symptoms since, I suppose it may be set down as a radical cure. It is quite evident that the blade of the forceps, or the pressure of the fœtal head, caused a fistula, and gave nature an opportunity, which she eagerly seized, to cure an inflamed bladder by drainage and absolute rest from contraction.

REPORT OF A CLINIC BY ESMARCH.

Professor of Surgery at Kiel.

Bellevue Hospital had the honor of a visit from the celebrated surgeon Esmarch, on Sept. 28th, at one of the surgical clinics. The distinguished guest was introduced by Professor Dennis to a large audience of professional men and medical students by whom he was enthusiastically received. He replied in a suitable speech and showed remarkable proficiency in the language for a foreigner, and then proceeded to illustrate some of the points of technique of his celebrated bandage. They may be briefly summarized as follows:

1st. The great mistake ordinarily made is in applying the bandage too tightly and thus favouring after capillary hæmorrhage. The cause of the hæmorrhage is well known to be due to paralysis of the vaso-motor nerves supplied to the unstriped muscle cells in the tunica media of the smaller vessels and arterioles, caused by the uncalled for pressure of the tight bandage. It necessarily takes some time for the vaso-motor nerves to recover from their paralysis, and during this time hæmorrhage is taking place from the uncontracted vessels; therefore, in applying the bandage, use only sufficient pressure to control the arteries, and do not, as is too often seen at clinics and surgical operations, apply the bandage as tightly as possible.

2nd. Never apply the bandage unless the patient is completely under the influence of the anæsthetic and muscular relaxation is complete; the reason for this is obvious. This point was well illustrated in the case of the patient about to be operated on, the reflexes were not completely abolished, the legs were the seat of clonic tremors, and the house surgeon proceeded to apply the bandage; but Esmarch checked him and refused to proceed with the application of the bandage until the patient was completely under the influence of the ether.

3rd. In the majority of cases the dressings can be applied to the limb before the bandage is removed, as was done in this case at the clinic. (This has special reference to bone operations.) This method has distinct advantages, as direct and continuous pressure is thus secured against the open vessels by the dressings before the bandage is removed, and this is in itself an excellent hæmostatic. Furthermore, it secures what has been the aim of all later surgeons, the presence of an aseptic clot of blood, which organizes, and thus the wound is rapidly healed; and, instead of the old story, where cases of necrosis after operation usually occupied two or three months in healing up, now, by the organization of this clot, perfect union is obtained in three weeks and the patient can be discharged.

4th. To control the hæmorrhage after operations, all that is needed in ordinary cases is irrigation of the wound with hot antiseptic solutions, which act as irritants to the vaso-motor nerves, and thus secured contraction of the arterioles. Then the wound is firmly bandaged, and this may be supplemented by slight elevation of the limb after it has been dressed and the patient removed to the ward. In anæmic, and other cases where it is important to have as little hæmorrhage as possible, Esmarch recommends, in addition to the above measures, a light constriction of the limb with the rubber bandage for six or eight hours afterwards, which favors diminution of the rapidity of the blood current and the formation of thrombi.

Esmarch then proceeded to the practical demonstration of his principles by performing sequestrotomy. The patient was an elderly man suffering from necrosis of the tibia and fibula of the left leg, of long standing, and supposed to be due to idiopathic osteo-myelitis; a venereal history corresponding to chancroid was obtained, but no syphilitic symptoms could be elicited; dead bone was detected by the probe.

The Esmarch bandage was then applied from the toes up, and only light constriction made above the knee. The hands of the operator were then washed and thoroughly disinfected with a solution of 1-2000 bichloride, and the patient's leg shaven

and irrigated with the same solution. An incision was made four inches in length, over the lower third of the tibia, and the necrosed bone attacked by the ordinary steps of the operation of sequestrotomy, and by chiselling through the anterior surface of the tibia, which was considerably thickened and indurated. Esmarch gave his experience of the use of chisels. During his later years, in all his bone operations, he has used nothing but the common carpenter chisels of English manufacture, for the following reasons: 1st, On account of their length and having a handle appended, the view is unobstructed, as is often not the case with short surgical chisels; 2nd, Being of larger size, the time occupied in cutting the bone away is much shortened, and in extensive operations this is often a desideratum; 3rd, Their comparative inexpensiveness, and at all times being obtainable. During the progress of the operation several gummatous nodules were discovered, which at once decided the character of the lesion, and the contents of the medullary canal having been found in a degenerated condition, were thoroughly cleaned out with a sharp spoon. The fibula was next treated in the same manner, and numerous other gummata were discovered. The wounds and cavities were then thoroughly cleaned out and irrigated with hot bichloride solution, 1-2000, and stuffed with iodoform gauze, then a quantity of previously used bichloride gauze was applied, and over this a bichloride muslin roller. Then the whole leg was swathed in antiseptic borated cotton, and over the whole a bichloride muslin bandage was firmly applied. The limb was then elevated, the Esmarch bandage removed, and the patient sent to the wards, the distinguished operator recommending that he be at once placed on anti-syphilitic treatment, and without a doubt a most favorable result would be secured.

Notes.—As the chips of bone were flying before the operator's chisel, they were eagerly gathered up as mementos of the great surgeon's visit, and Dr. Sayre was observed to wrap one up in a ten dollar greenback, and put it carefully in his pocket, remarking that he thought more of the chip than the bill.

As regards the application of the dressings before the elastic bandage has been removed, I would state that, heretofore, most of the New York surgeons have been in the habit of taking off the bandage and controlling the capillary hæmorrhage before they applied the bandage. This has always been a troublesome procedure, and one of the disadvantages of the Esmarch, in that a considerable length of time was occupied before the hæmorrhage could be stopped. Many of the surgeons expressed themselves as having been favorably impressed by Esmarch's methods, and since his visit to Bellevue all such cases have been dressed before the removal of the bandage, and so far very good results have been reported.

NARCOLEPSY.—BRIEF REPORT OF A CASE IN PRACTICE.

BY D. H. DOWSLEY, M.D., M.R.C.S.,E., KINGSTON.

This affection regarding which little is positively known, may perhaps be sufficient apology for bringing to your notice the report of a single case:

A blacksmith by trade, aged about 28 years, a powerful, well-built man, apparently in good health, was subject to short attacks of deep sleep, lasting a few minutes, from which he would awake refreshed as from a natural sleep. The attacks of sleep would occur at any time, regardless of the hour of the day, or degree of temperature. On one occasion when driving to town in the morning, about nine o'clock, of a winter day, sitting upright in a sleigh with a companion by his side, and driving through pitches, he fell into a sound sleep, still retaining his position, upright in the seat. He slept for a few minutes, and woke apparently quite refreshed.

There were no symptoms of premonition; no symptoms of a convulsive nature, either preceded or followed the attacks, which occurred at intervals of a few weeks, and sometimes more frequently. The family history, as far as known, was good. This affection which appears to be a neurosis, has received the name of narcolepsy, and Legrand appears to look upon it as a true neurosis. This patient was treated with arsenic and iron. He thought he had made some improvement, from the fact that the sleeping attacks, did not occur so frequently, otherwise there was no change, the attacks being the same when they did occur. Speaking from memory, the attacks in this case have occurred during the past fifteen or sixteen years, with the frequency stated. If, as Legrand supposes, this is a true neurosis, the improvement, if any, was probably due to the arsenic.

Correspondence.

OUR NEW YORK LETTER.

From our own Correspondent.

NEW YORK, Oct. 23rd.

The medical profession of this city have had a great treat of late, in the presence among them of some of the most distinguished surgeons and physicians of Europe, who have been attending the Congress of American Physicians and Surgeons, held at Washington, Sept. 18th, 19th and 20th, 1888. Among those who visited us were Prof. Esmarch, Drs. Graily Hewitt, David Ferrier, Pye-Smith, Mr. Victor Horsley and Mr. Durham. Prof. Esmarch was tendered a reception at the New York Hospital by Drs. W. T. Bull and R. F. Weir. All medical men of note of the city were invited to meet the professor and shake hands with him. He performed the operation of removing the glands of the neck at the New York Hospital, and was again favored by having a very large number present to see him operate. Unfortunately the professor has since been very ill, and his friends were apprehensive of his dying here, but at this writing he is doing well. The celebrated gynæcologist, Graily Hewitt, of London, was entertained by Dr. W. Gill Wylie at his house.

The New York State Medical Association held their meeting on Oct. 9th, 10th and 11th at Hotel Brunswick. The meeting was very interesting. The first paper read was entitled, "The Medical Profssion and the Public," by the president, Dr. John Cronyn. It would be well if the profession was more harmonious in instructing the public to distinguish between true and false, between the charlatan and the conscientious physician. This will take a long time, but the profession can accomplish it in the end. Physicians, too, often encourage ignorance; they should strive to enlighten their patients. Genius, ambition, and love of profession could never make a physician, if the quality of the genius was not medical. A physician was born, not made, he must have reverence for the possibilities of his profession; he should be swift in action, possess power of immediate perception, analysis and induction.

Dr. F. W. Putnam read a paper entitled "Hiccough, with Notes on Treatment." Milder cases he said are cured by domestic remedies, but in cases of long standing, electricity applied to the diaphragm, the phrenic nerve, and the use of dry-cups over the phrenic nerve are of great benefit. There are many drugs that can be used with good effect, as chloroform, ipecac., valerian. Dr. C. A. Leale reported a very interesting case, and showed specimens. "Raspberry seeds mistaken for Gall-stones," presented at the last annual meeting by Dr. R. H. Labine, consisting of small hard corrugated bodies passed by a woman. There were in amount about half a pint of them. They were at first thought to be gall-stones but proved to be raspberry seeds.

Among many others, a paper entitled, "Does the Menstrual Flow originate in the Tubes," was read by Dr. E. J. C. Minard. The paper was based on a case in which menstruation was going on at five months after child-birth. The patient was nervous and prostrated; the flow was very free. On examination the uterus proved to be inverted, the tubes dragged down to the peritoneal surface of inverted uterus. The tumor that was formed was dark red with some darker spots over the surface, which might be said to resemble the tongue of scarlet fever without any coating. From the surface there could be found no flow, but from the tubes a dark, healthy menstrual flow could be wiped away; it was non-fibrinous, passed out drop by drop, and when the tubes were pressed upon would form quite a stream for an instant. Now, if it does always come from the tubes, it will, says the Dr., explain many things in gynæcology that are now dark.

At the meeting of the Academy of Medicine, on Oct. 4th, Dr. E. J. Janeway read a paper of great interest, "Remarks on the Diagnosis of Diseases of the Liver and the Fever accompanying Biliary Obstruction." The Dr. told of the difficulties in making diagnosis of the cases as compared with diseases of the heart, lungs and kidneys. Physical examination alone he said would never prove sufficient in the majority of diseases. That in the kidneys, the urinary examination will give a clue. He went over the ground thoroughly, giving many points to aid in diagnosis. He mentioned a case of acute yellow atrophy of the liver, in which the bile duct was not obstructed, and there was no bile in the stools. The writer had a case of acute yellow atrophy of the liver

in one of his wards, only a few days, where the stools at first had no bile ; they were white, and on autopsy there was no obstruction to the bile duct, but a few days before death the stools were colored from blood. Dr. Janeway spoke of explorations with hypodermic needle for deep abscess of liver. He prefers to make punctures either in axillary line or on the back. He thought the occurrence of abscess in the left lobe was about one in four.

"AJAX."

Selected Articles.

"IT IS TO THE LYMPHATIC SYSTEM AND CELL AGENCY THAT MOST, IF NOT ALL, FORMS OF DISEASE ARE DUE."*

In every variety of disease to which the human body is liable we have a direct cause producing a definite result, and to determine the exact nature of the disease both the cause and its result have to be taken together into consideration. Thus fever is a symptom or result of some agency in the body producing that condition ; but to constitute scarlet fever we must have these symptoms or results take a more or less definite course, be of a definite character, and dependent upon a specific agency. Hence in scarlet fever, and also every other variety of disease, we have an agency, or exciting cause and results, or symptoms originating therefrom. Between these a definite period of variable duration exists, known as the latent period, and it is during this period that I believe highly important changes take place. For example, in the ordinary operation of vaccination a definite material is introduced into the body at a certain spot, and no immediate results are visible, and it is only after the lapse of a certain period of apparent quiescence that a definite local result manifests itself, and this gradually takes a progressive course, accompanied with a distinct constitutional effect.

The question arises, What is it that occurs between the inoculation and the commencement of the papular formation with its attending febrile symptoms ? To arrive at a possible answer to this question, we must first bear in mind the nature of the lymph inoculated. This is a slightly viscid, clear, and transparent fluid, with alkaline reaction and little or no smell, and when viewed with the microscope is seen to have a clear liquid portion or plasma, and a solid portion made up of corpuscular elements, which float in the plasma or lymph ; these are few in number, of somewhat rounded but irregular outline, and correspond in all particulars to a description of the corpuscles found in the lymph of the lymphatic system, and both of these are not far removed in character from that of an embryonic protoplasmic cell. In the next place, we must recollect that the seat of inoculation is constructed of cells, arranged with varying regularity in layers ; the lowermost of these, belonging to the epidermis, are elongated in shape and perpendicularly disposed upon the dermis, and with their extremities intimately connected with the corresponding irregularities of the dermis. Immediately above these, the cells are of more rounded shape and are furrowed, and so arranged that these furrows, approximated together, form little channels. Above these we have the flattened cells which form the upper and denser portion of the epidermis. With the exception, therefore, of these latter layers, the epidermal cells are sufficiently loosely packed together as to leave interspaces, however small, between them ; and, moreover, in these spaces leucocytes, or corpuscles similar in structure to those spoken of in vaccine lymph, and the lymphatic system may here and there be observed, and they also contain a fluid plasma. The dermis, or subcutaneous tissue also shows, on close examination, the existence of similar spaces, with their cells and plasma, and continuous above with those of the epidermis, and below in the closest contact, if not continuous, with the lymphatics. These spaces may therefore be looked upon as the very commencement of the lymphatic system. Now, in vaccination, these spaces receive some at least of the inoculated vaccine lymph ; for, if the lancet wounds the bloodvessels in its course, it has first passed through spaces existing above them, and, as the blood current is rapid, and therefore does not afford sufficient repose for developmental changes to take place in it, we must, I think, conclude that such changes as do take place occur in these lymph spaces. In their ordinary course of life the lymph cells grow and multiply, and in their growth assimilate materials from, and modify the character of the plasma in which they live, in much the same way as a torula cell of yeast assimilates material from the saccharine solution in which it grows during the process of fermentation and converts that solution into alcohol. When, therefore, the plasma derived from a vaccine vesicle is deposited in a lymph space, it mixes with the plasma already existing there, and the cells in these spaces now live in material, much of which is the product of vaccine lymph cells. In their growth and physiological functions they assimilate and build themselves up with this material, and so get impressed upon them the same characters as the cells of vaccine lymph—as Dr. Creighton has called it—become spermatised. These cells then, in their turn, modify the plasma of the next space (remembering that the spaces are virtually continuous), and so on, until, by an onward progress from

* Extract from Thesis for the M.D. Degree.

the periphery inwards, varying in its extent and speed according to the virulence or specific strength of the inoculated cells, or cell products, the whole lymphatic system becomes spermatised and brought into a similar condition to the foreign agency introduced. We need now only recollect the intimate connection between the lymphatic system and the vascular system, to understand how the whole blood-vascular system generally becomes, in the most virulent varieties, infected. Since the vaccine lymph inoculated is foreign to its new situation, it acts as an irritative agent, producing a local and general inflammatory result, but tainted with the peculiarities of the disease from which it is derived. Looking further into the matter, let me again state that the vaccine lymph ultimately infects the whole system as above described, and so long as this general infection remains in the system, any subsequent inoculation with vaccine lymph is unable to bring about the same definite result, since it is no longer foreign to the plasma of the spaces then receiving it; but so soon as this influence has died away, or been worked out, any subsequent vaccine lymph inoculated would have the same power again, varying in extent, however, with the greater or lesser loss of the influences. In vaccination the accompanying symptoms are weak in intensity on account of the weak spermatising influence of the vaccine lymph. They are febrile in character, and are no doubt due to an altered condition of the blood, brought about by the changes in the lymphatic system being conveyed by the lymphatics into the bloodvessels. As the contagium of variola can only produce variola of a like kind, so also the contagium of a definite exanthematous affection can only produce the skin eruption peculiar to its progenitor. It would seem that the specific fevers vary somewhat in the influencing power of their contagia; in many it seems to be life-long, and hence it is that one attack of these gives immunity from subsequent ones. But we must recollect that there is always a tendency for this influence to diminish by age, and that therefore, in some cases, it sufficiently disappears to render the subject liable to a further invasion of this particular disease. When from ill-health the physiological activity of the lymphatic cells in the system is diminished in power, it is naturally even easier for a contagium to attack them than when in perfect health. Hence it is that women after parturition so readily contract scarlet fever. Also, when so reduced in strength from nerve influence, or other causes, their products suffer and are weak, if not abnormal in constituents, and these may therefore develop diseases without any external agency whatever; hence the connection between parturition and phlegmasia dolens.

Taking the above-stated view respecting the lymph spaces, and their connection with the lymphatic system, we are enabled to state that this system has an extremely wide distribution throughout the human body; existing, in fact, not only in the cutaneous and subcutaneous tissues, but also internally it is found in the follicles of the lymphatics, Malpighian corpuscles of the spleen, Peyer's patches and solitary glands of the intestine, follicles of the pharynx, tonsils, trachoma, glands of the conjunctiva, also around bloodvessels, in the pia mater, smaller bronchi, beneath the plural endothelium, and also that of the peritoneum, alimentary mucous lining, and medulla of bones. From this immensely wide distribution, therefore, we have no difficulty in understanding how easily the lymphatic system can be reached from without, and that the contagium of a disease need not necessarily be artificially inoculated to gain an entrance into it. Scarlet fever, for instance, seems to gain entrance by the throat and respiratory tract. In measles the conjunctivæ, seem to have a very early primary connection with the specific contagium. In typhoid fever it would seem to gain admission by the intestinal tract, judging from the lesions of the agminated and solitary glands and secondary involvement of the mesenteric glands. Passing from the so-called specific fevers, we may next mention syphilis; and here we also have a distinct inoculation in the neighborhood of the lymphatic system, and the neighboring lymphatic glands are soon involved; and further, before the characteristic eruptions make their appearance, there is a distinct latent period in which changes such as I have described can go on; moreover, we know also the beneficial effect of mercurial inunction on this disease. In syphilis, however, the specific influence seems extremely tardy in working itself out. Again, in pyæmia we find the seat of primary mischief to be some local abrasion, or wound accidentally or surgically made, or after parturition, and in all of these the connective tissues and lymphatics are early involved; and although cases do occur in which no such lesion seems apparent, we may still suppose that the virus can reach the lymphatics by the respiratory tract. In elephantiasis græcorum, the cellular matter which infiltrates the affected tissues is probably developed from the connective tissue cells and leucocytes. In ague, the spleen is soon and sometimes permanently involved, and it will be remembered that this organ is intimately connected with the lymphatic system. In skin affections we can also show forth this lymphatic connection. Thus in erysipelas the tonsils are often the seat of premonitory inflammation; the erysipelatous swellings contain lymph and corpuscles, the neighboring lymphatics are enlarged and tender, and the blood contains a distinct increase in the number of its white corpuscles. It would appear, therefore that in those forms of disease, at least, which are recognized as the result of a contagium, the lymphatic system seems to be the chief

seat of the more important changes which go on during the so-called latent period, and that the definite symptoms which follow are results of these changes conveyed by the medium of the blood-vessels to the several organs and other parts of the body. Taking now into consideration other varieties of disease, such as tubercle and tumors, we still find the lymphatic system connected with their development or spread, for there seems to be but little doubt that pulmonary tubercle has its origin in the inter-alveolar septa and parietes of the bronchioles, in which situations are found embryonic cells and leucocytes in large numbers; and, further, the spread of tubercle follows a lymphatic tract, as in those cases in which a caseous lymphatic gland is the source of generalized tuberculosis; also we know that the mucous membrane of the intestinal tract, a part most closely connected with the lymphatics, is a common seat of tubercle.

As I have stated, it is from the product of a cell's activity, in its turn affecting or spermatising other cells in its immediate contact by their assimilation of this abnormal product (ordinary lymph being the normal medium of a healthy leucocyte), that all the subsequent changes are probably due; it need not of necessity, in every instance, be the product itself that gains admittance into the body to act as the germ of a disease, but the particular cell manufacturer itself may, in some instances, enter and exert its direct influence, therein, or even the normal leucocytes, or cell elements of the body may, by abnormal irritation or nerve influence, have their physiological characters changed, and the lymph, therefore, in which they grow will, by their assimilative and productive process, be likewise ultimately changed in a corresponding manner. It is by this latter method that I would explain the enlargements of lymphatics from distal irritation, and also the possibility of developing tubercle artificially by other material than the products of tuberculosis, as Sanderson and others have long ago shown. Also this will, I think, in some manner, explain the connection between a sudden shock and subsequent development of disease dependent thereon, such as we now see from railway accidents, and such as I believe to have been the case in a young patient of mine who died of localized meningitis, which gradually developed itself in a previously perfectly healthy person, with no trace whatever of tubercular history, soon after receiving a severe shock by witnessing the accidental death of a young friend whom he was chasing in the dark, and who, forcibly running against a water hydrant on the roadside, received such internal injuries as to cause rapid death. Again, there may be in some cases an hereditary tendency for leucocytes, or cell elements to take on an abnormal growth at a fitting opportunity afforded by ill-health, or the decadence of life, implanted upon them by the parent, just in the same way as features and peculiarities are implanted on the offspring of man and animals. Also the foregoing ideas do not exclude bacteria as a source of disease, they being equally living cells and bringing forth their own peculiar products. Finally, we know that tumours have a cellular origin, and in one class, at least—viz., the carcinomata—the lymphatics are most intimately connected with their growth and spread, for the alveoli of cancers may be regarded as the dilated origins of the lymphatic system. Whether these can be derived from contagion seems as yet difficult to positively determine, but from cases which have come under my own observation, I am personally inclined to believe it possible. Taking, then, into consideration the above ideas, I desire to maintain that it is to the lymphatic system and cell agency that most, if not all, forms of disease are due.—W. Groom, B.A., M.D. Cantab., etc., *Lancet.*

LACTIC ACID AND DIET IN INFANTILE DIARRHŒA.

Less than two years ago, Hayem, of Paris, presented to the Academy of Medicine in that city a report on the use of lactic acid in the green diarrhœa of children. In the preparation of this work he had been assisted by his interne, Lesage, whose particular share in it had been the development of some pure gelatine cultivations of a germ which Hayem had discovered as being present in the vomited and rectal discharges of this variety of diarrhœa. He said he had established beyond the possibility of a doubt, by clinical experiment, the direct relation of this germ to the green color, and as such he claimed for it the right of discovery. However, soon after his report was published this claim was contested by Damaschino, who said that, three years before, he had discovered this same microbe, had shown its relation so green diarrhœa, and had presented to the Biological Society some micro-photographs of it. Hayem admitted his priority to the microscopical discovery, but still claimed as his own the credit for showing the proper relation of the bacillus to the particular form of diarrhœa. He stated that Damaschino had gone no further than merely to recognize the germ and then cited the experiments which Lesage had made of introducing into the intestinal tract of healthy animals some pure cultivations, and producing by them a characteristic green diarrhœa. He also showed that the discharges were contagious.

The microbes, which are rod-shaped and can exist only in an alkaline medium, show a disposition to bunch themselves into groups, and their number is in direct relation to the severity of the attack. These are, therefore, the first succesful attempts to establish the parasitic origin of at

least one form of diarrhœa, as probably also they are the first efforts to treat the disorder according to germicidal methods. Since then, in this country, that attention has not been given to the experiments which the conclusions would seem to warrant.

It was my privilege, soon after the report of Hayem was published, to have an opportunity of testing clinically in dispensary work the statements made by him. After using the acid in the green form of diarrhœa for a short time, the suggestion presented itself of trying the effect of it in all the varieties of diarrahœa without reference to the color of the stools. This idea of the universal application of germicides to diarrhœa was strengthened by the paper, a few months later, of Dr. William D. Booker, read before the International Medical Congress at Washington, on the different forms of bacteria found in the discharges of summer diarrhœa. He stated that twelve varieties had been isolated, eleven being bacilli and one belonging to the variety cocci. He gave their action on milk as follows: "Some coagulated milk with acid reaction and evolution of gas; one caused coagulation with alkaline reaction; one gave the milk a peptonized appearance; and other varieties caused no perceptible change."

On account of its simplicity as well as its elegance, the employment of this universal acid treatment was a very easy one, and the results were such as to leave no doubt as to its usefulness. The trial began during the summer of 1887 and has been continued during the present summer, over one hundred patients receiving treatment. The age of the patients varied from ten weeks to twenty-four months, and there was great variety in the severity. The stools, which ranged from three to twenty daily, presented all the varieties found in the different forms of diarrhœa. They were the watery-mucus, the yellow with coagulated casein, the slightly greenish with mucus, casein, and sometimes blood, and the distinctly green. In very few cases of the green diarrhœa so treated was there failure to afford some relief, and many of the recoveries were certainly remarkable. But, while the trial confirmed the conclusions of Hayem as to green diarrhœa, it also establishes the usefulness of the acid in the other varieties.

The significant features in support of lactic acid are these: It not only relieves the diarrhœa, but it also acts beneficially for the vomiting, fever and restlessness. It changes also the very offensive odor of the stools. The vomiting is controlled within a few hours so completely that the child can begin to take nourishment, and, although it may subsequently occur at intervals, a continuance of the treatment soon stops it. Again, the fever which attends every case of any severity is reduced by it. To not a single child in the one hundred cases was any antipyretic given, the fever usually subsiding before the diarrhœa had fully stopped. Attending the reduction of temperature there was shown a disposition to sleep, and the intestinal pain, which was often severe, received no other medication than the acid. To none of them was opium given in any form.

Within a period varying from twelve to seventy-two hours the discharges would begin to change, the greenish becoming less watery and assuming a yellow color, while the watery-yellow and sometimes bloody had a greater consistence without the unpleasant odor. The general results have been so satisfactory that all astringent and alkaline remedies have been abandoned, lactic acid alone now being given, no matter what variety of diarrhœa presents itself.

But, as the children so treated came largely from tenement-houses, where crowding, heat, poor ventilation, and improper food are important factors, it was found advisable to adopt some form of dietetic measures in connection with the acid. In a monograph on the treatment of the diseases of children, read by Dr. Jacobi in 1879, a valuable suggestion is given concerning the feeding of children. The frequency of diarrhœa in children fed wholly on breast milk had already presented itself, and for a considerable time it had seemed contrary to reason to so continue feeding, although good authorities advised, whenever possible, to insist upon a diet wholly of breast milk. This was done and the result was no better, while in children somewhat older, who had begun to take other foods, there was usually a benefit when these were alternated with mother's milk. An exclusive diet either of breast milk or prepared food, did not seem to give good results, and the question was not satisfactorily answered until the method employed by Dr. Jacobi was tried. In his monograph he states that even normal mother's milk contains fat that is not digested, and that when diarrhœa occurs, if lumps are found in the passages, they are not wholly undigested casein, but, on the contrary are mostly fat, and probably remnants of intestinal epithelium. These fats are olein, margarin and stearin. Fatty acid in abundance is a common cause of derangement of digestion and assimilation, and it impedes the normal secretion of other digestive fluids.

He then quotes the conclusions of Wegscheider concerning the fat in breast milk: "Fat cannot be completely absorbed; one part leaves the intestines in a saponified condition; a second part as free fatty acid: a third as fat in an unchanged condition." From this he concludes that one precaution to observe is to guard against food too rich in fat. As the mother's milk is best when it can be tolerated, he endeavors to make this possible by diluting it with some liquid farinaceous food. To do this, he suggests preceding the nursing by one

or two teaspoonfuls of barley-water. Instead, however, of the barley-water, some of the prepared foods were tried according to this principle and the results were beneficial, due, probably, to the small percentage of fat which they have been shown to contain. There was less troublesome casein to act as an intestinal irritant, and, when they were taken in connection with the lactic acid, recovery was usually speedy. This dietetic precaution has been adopted, and is recommended, whenever practicable, in either variety of exclusive diet. The size and frequency of the dose of lactic acid varies entirely with the age of the patient and with the number of discharges. A two-per-cent. solution is usually ordered. The following is the formula advised by Dr. Hayem:

℞ Pure lactic acid, ... ℥ ss.;
Syrup, ... ʒ j;
Water. . . . . ʒ iij. M.

Each drachm of the solution contains about one drop of pure lactic acid.

For a child under twelve months, half a teaspoonful every hour is sufficient. If the discharges are very frequent, a teaspoonful may be given every hour for six doses, changing then to half a teaspoonful. For over twelve months a teaspoonful every hour is the ordinary dose. Dr. Hayem recommends its use one day after the diarrhœa has stopped. The large doses at first suggested in the report do not appear to be necessary, and there is danger, if it is given in larger quantities, of causing irritation of the buccal mucous membrane. It is best to dilute even these small doses, as otherwise there is a decided acid taste, not unpleasant, however. Other germicides have been suggested and tried, such as salicylate of sodium and naphthaline, but lactic acid, while possesing all the curative properties of the others, has additional advantages:

1. It is more palatable than salicylate of sodium or naphthaline, more readily tolerated, and simpler to administer.

2. It controls vomiting and permits the earlier use of food.

3. Under it, temperature is reduced and intestinal pain quieted.

4. Restlessness is overcome and sleep rendered possible without the use of opiates.—Dr. F. W. Shaw, in *N. Y. Med. Jour.*

PATHOLOGY AND TREATMENT OF THE ENLARGED PROSTATE.

In bringing this subject before you, I would ask you to observe that I purposely avoid speaking of the prostate as a gland, as I consider such a term inappropriate to a part where, so far as function is concerned, the secreting element is subservient to the muscular. As I have recently discussed this subject at considerable length in my Lettsomian Lectures, I shall confine myself as closely as possible to those points in pathology which it is necessary to make prominent for clinical purposes. If we sum up our experience as practitioners relative to enlargement of the prostate as observed in advancing years, I do not think we shall find much difficulty in recognizing that this physical change exists under two conditions which are sufficiently well marked. Whatever may be the proportion of males over sixty years of age who experience some degree of enlargement of the prostrate, the evidence appears tolerably conclusive that it is only the minority of this number who develop symptoms which can be regarded as evidence of disease. Hence we may divide persons who have large prostates into two classes: (1) those who do not suffer from them, and (2) those who do.

Taking the former first, I have for a number of years carefully watched persons who had large prostates, but were not aware of it themselves from any circumstances which might tend to suggest it. In many instances the discovery was made, as it were, quite accidentally. In addition to evidence of this kind, I have met with numerous instances where post-mortem examination revealed the presence of a considerable prostate, though no symptoms previously existed. Facts such as these seemed to suggest that the enlarged prostate had come in for much uncalled for abuse, and that like other hypertrophies in the body, it might be serving a useful but hitherto unrecognized purpose. Passing to the second class of cases, it was equally evident that there existed a considerable proportion of instances of prostatic enlargement which were attended with most distressing symptoms of vesical obstruction and irritation. The contrast between these two classes of cases, which did not appear to be necessarily transitional, was so marked as to almost suggest in itself some physical alteration in the part to account for the difference. Without going further into detail, my examinations during life and after death led me to the conclusion that so long as the prostate retained its natural structure, it did not seem to matter much, so far as its function was concerned, what size it attained. On the other hand, when it underwent degenerative changes which reduced it to little else than a mass of fibrous tissue in the form of lobulated, nipple-like, or interstitial tumours, it was pretty certain to excite varying degrees of irritation.

The next points that naturally arise are: First, how is it in some instances that the prostate, though increased in bulk, still remains throughout life histologically and functionally normal? And, secondly, under what circumstances does it pass into the condition of a fibroma, and produce symptoms of obstruction and cystitis?

In reference to the first point, I would remark that the human body furnishes us with undoubted instances of hypertrophies, proving themselves to be not only necessary, but precisely compensatory, relative to what is required. If, as I have urged, the chief function of the prostate consists in providing a retentive as well as a supporting apparatus for the contents of the bladder, there is no reason, when the time comes for substituting qnantity for quality, why the provision should not prove to be permanently compensatory. The conditions under which muscular hypertrophy exists, as observed about the neck of the male bladder, seemed to indicate that, should circumstances arise to render the necessity for such increase inoperative, the structural excess then undergoes degenerative changes, and assumes properties in accordance with that type of tissue with which it has thus become assimilated. And it appears to me that in the study of hypertrophies there yet remains some interesting work to be done in connection with those transitional changes which depend upon the suspension of, or alteration in, the conditions which in the first instance rendered the overgrowth a necessity.

We have seen that the large prostate is able to perform its function just as perfectly as the smaller one of earlier life. Taking, however, those instances where such is not the case, and where the large prostate proves to be a serious detriment to the individual, it seems to me that in the greater portion the development of symptoms are about coincident with that physical change in the shape of the bladder which we know by the name of "pouching," where a depression is formed above the prostate in which urine may lodge. It has been generally taught that this pouching of the bladder is a direct consequence of enlargement of the prostate, the supposition being that as the latter grows towards the bladder cavity, where there is the least resistance, a depression is left above the growth. Now though this may in some degree be true, it does not represent what commonly occurs. My observations lead me to believe that this pouching, or space for residual urine, is caused by the sinking of the bladder wall itself away from the prostate as the result of urine pressure on the part, and not in the first instance by the encroachment of the prostate upon the interior of the viscus. It is quite easy to demonstrate this upon the dead subject. When this occurs with a large prostate which hitherto has been performing its functions in a natural manner, the immediate effect is to cause a prominence which previously had no existence. Following upon this, we have the conversion of the prominent prostate mass into a fibroma, with the gradual acquisition of those properties which such a structure possesses. In the bladder we see this taking the form of fibrous masses, which cause obstruction and excite mucous exudation and cystitis. To attribute the latter symptoms to the mere presence of a few ounces of urine in the bladder, which cannot be spontaneously voided, is certainly not warrantable. Passing to points in practice, it is evident that if a person has a large prostate, however well it may be working, it behoves him to be careful that the bladder is not submitted to such a kind of usage as either may gradually or suddenly alter its relations to the outlet. All those circumstances which by their degree or continuance throw an undue strain upon the bladder at a time of life when the tissues begin to lose somewhat their power of resistance, should be studied with the view of avoiding them. In the next place, when these strains do come by the wear and tear and accidents of living, we should be prompt in recognizing them and giving the necessary assistance, either mechanically or by medicines, as the case may be, to prevent permanent damage being done.

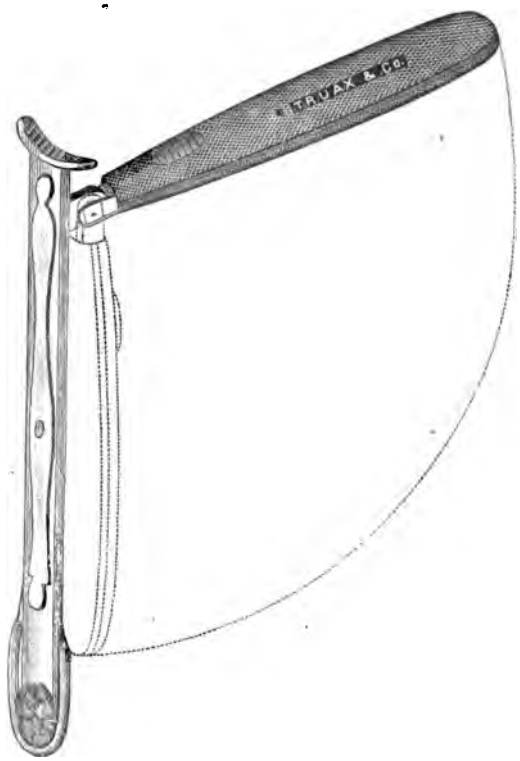
I would say a few words, in conclusion, as to the treatment of prostatic hypertrophy when the part has to a large extent assumed the structure and properties of a fibroma. The degree of vesical irritation and obstruction under these circumstanc is sometimes very intense, and various means have been proposed to deal with this condition by operative procedures, having for their object either the section of the obstructing part with provision for the more perfect drainage of the bladder by artificial means, or the removal of more or less of the prostatic mass. In both of these directions considerable relief has been afforded. Having regard to the fibroid condition the part assumes, I have thought, if there is any truth in Apostoli's treatment, that it is possible it might under these circumstances prove serviceable. I have now this subject under consideration, but at present I have not sufficient material for our purpose of to-day. I am aware that electrolysis has been practised both in this country and in America, but I cannot say that as yet we have sufficient evidence to warrant its more general adoption. I would lay stress on the examination of the prostate from the rectum as determining our views in reference to the patient's future when retention of urine is due to this cause. When this happens in a person with a hard nodulated prostate, where there is evidence to the touch that fibrous tissue predominates largely over the muscular, the power of the bladder seldom returns, and the use of the catheter is generally perpetual; and when, on the other hand, the prostate is found soft and yielding to the touch, indicating that muscle still prevails, we may as a rule anticipate complete restoration of function. I attach importance to the distinction, as in most cases of acute retention due to prostatic enlargement it enables us to form reliable opinions relative to the probable duration of catheterism.—Reginald Harrison, F. R. C. S., in *Lancet*.

AN IMPROVED TONSILOTOME.

Any physician who has had a considerable experience in tonsilotomy, with the various tonsilotomes, will not be likely to deny that these instruments are generally too complicated. They are armed with needles, barbs, or sharp-toothed forceps for piercing the tonsil and dragging it through the fenestra before any cutting is done by the blades. A tonsilotome constructed after the pattern I have made renders the barbs, etc., unnecessary. It reduces the painfulness of the operation by one-half; it divests the procedure of any danger of an accident to the operator or patient; it makes a skilful and easy operation possible with a minimum amount of experience; it resembles a large folding tongue depressor so closely that children usually offer no opposition to its introduction for the removal of the first tonsil: and it combines strength and compactness with simplicity of construction. It is made on the principle of the guillotine, the blade of which is propelled by the thumb of the same hand which grasps the handle. The latter is set at such an angle to the shaft as will permit the most perfect coördinate action of the muscles of the hand and arm of the operator. All the work may be done with one hand. This advantage is not a small one for two reasons: The powers of coördination and antagonism of muscles are far more perfectly under control in operating an instrument that requires but one hand, than they are when both hands must coöperate; and one hand of the operator is left free to hold the head of the patient, if necessary, as the dentist does in extracting a tooth. The advantages of a tonsilotome that can be operated entirely by one hand are about the same as in a tooth forceps which does not require two hands to manipulate.

I have had two sizes manufactured, the smaller having a fenestra of the calibre ordinarily found in such instruments, the larger supplied with an aperture larger than the largest Mackenzie tonsilotome, while it is so compactly constructed as to require less space in which to operate. I have used the larger size to extirpate enormously hypertrophied tonsils in children as young as two and one-half years, where it was impossible to insert the Mackenzie instrument of the necessary size. The smaller one is sufficient for the majority of cases, but the fenestra is not capacious enough to admit the bases of the extraordinary glands we occasionally see. It is advisable to remove the whole tonsil, and as the tops only of the largest tonsils can be severed with the smaller instruments, it may be better to have the larger size if but one size is to be kept.

The blade is so protected as to make it impossible to wound the ascending pharyngeal, or the internal carotid artery. The shaft that propels the blade is of such width as to make the use of a gag unnecessary, for it protects the finger of the operator from the patient's teeth, if it is placed in the mouth to ascertain when the fenestra is in such position as to embrace the whole tonsil, as it is necessary for one to do when operating in children with other tonsilotomes. Since I have used the guillotine I have not had my finger bitten, while it was not an uncommon occurrence before to come off second best, as far as pain was concerned. With the shank wide enough to afford protection it is unnecessary to introduce the finger into the mouth, for the teeth and lips cannot close enough to prevent the operator from seeing plainly the field of operation. There is no working in the dark, or fear of damaging structures you do not wish to attack.



The handle is firmly fixed to the shank with a hinge-joint and self-acting spring-lock, so that the fenestra can be pressed down around the base of the gland with any degree of power desired. This feature dispenses with any necessity for hooks, forceps, needles, or barbs for spearing the tonsil. The latter being a soft, fleshy mass, adapts itself to the shape of the fenestra and protrudes through it the instant its base is pressed about. The pain of spearing or tearing the tonsil by toothed or barbed accessories, designed to drag the gland through the fenestra before the blade cuts, excites the most vigorous struggling and resistance on the part of a child. Even when the utmost care has

been exercised, the barbs have pierced the soft palate, or the surgeon's finger, instead of the tonsil. Moreover, the gland always comes out with the instrument, the same as though barbs were used. There is another important advantage in having the handle attached to the shank with a hinge provided with an automatic lock, for the cutting extremity of the instrument cannot be thrown out of your control by a disturbance of the coaptation of its parts. The last time I operated with a Mackenzie tonsilotome the child jumped just as I was placing the fenestra about the tonsil. The shank revolved upon the handle, leaving the latter in my hand, while the cutting end was entirely displaced and removed from the vicinity of the gland. It is impossible for this improved tonsilotome to play you such a trick. The handle is made of rubber, knurled so as to afford a firm grip, and it contains a concealed spring-lock operated by a convenient thumb-plate. When this is moved downward the hinge-joint is unlocked, and the instrument folds upon itself like a pocket-knife, occupying the space of about an inch and a quarter in width and thickness by six and one-half inches in length.

Another pertinent point that should not be neglected in this age of antisepsis, is the provision for cleansing and disinfecting the three pieces of which the instrument consists. By raising the proximate end of the horizontal top-spring of the shaft and swinging it 90° to either side, it becomes disengaged from its lock and it liberates the blade from the shank. This arrangement makes it as simple as possible for taking apart, cleansing and putting together again.

In amputating the apex of a relaxed and elongated uvula the tonsilotome should be used with the handle directed upwards. It should occupy just the reverse position as a uvulatome to the one it occupies when used as a tongue depressor.

Another merit that is not too small to mention is that its simplicity of construction renders it inexpensive.—*Dr. Seth H. Bishop in Jour. Am. Med. Association.*

THE COMPARATIVE MERITS OF TRACHEOTOMY AND INTUBATION IN THE TREATMENT OF CROUP.

Dr. O'Dwyer's method of intubing the larynx, he said, has now been before the profession in a prominent manner about three years, and it is surely gaining favor, as its merits and its limitations are being more clearly understood. The operation has its advantages and its disadvantages. It gives relief to the dyspnœa and it saves lives. The statistics of recovery vary much, as in tracheotomy. Twenty-six per cent. is a fair average after intubation. The recovery rate in 327 tracheotomies performed at the Boston City Hospital was twenty-nine per cent. In about 100 cases of intubation performed at the same institution the rate of recovery was twenty-six per cent, showing a slightly smaller percentage than the old operation. It is not claimed that these figures and facts are conclusive. The number of intubations is, as yet, too small to settle the question. The recovery of patients under three years of age was in the same proportion after each operation, namely, twelve per cent. O'Dwyer, Brown, and Waxham save about one in four after intubation; Huber and Montgomery save one in two; Northrup and Denhard save one in five; Jenning, one in ten; Chatham, one in fifteen; and A. B. Strong, one in thirty-one. This variation of results in the experience of different operators, proves conclusively that the type of the disease determines the result to a great extent—far more, in fact, than any mode of treatment. The conclusion on this point is that the new operation saves nearly, or quite as many patients as did the old.

In regard to the facility of doing intubation, it may, like tracheotomy, be easy or difficult, according to the age of the child, the condition of the larnyx, and the strength of the patient. Both operations are difficult in children under three or four years of age, and both are attended with some danger. In tracheotomy the risk lies principally in hemorrhage and collapse. In intubation, it lies in pushing membrane, etc., down in front of the tube, producing more or less complete obstruction. In very weak children, collapse may result from prolonged efforts at placing the laryngeal tubes. Under these circumstances the surgeon should choose the operation with which he is most familiar. The old operation can be done with one good assistant. Intubation requires at least two fairly good ones. Unless great care be taken, the operator's finger may be severely bitten, which, in at least one case, has resulted in death.

It is desirable to have a physician close at hand for three or four days after both operations. If the tube must be allowed to take care of itself, intubation is preferable. If ordinary care, such as a good nurse, or other clever person can give, is available in cases located at a great distance from a physician who can place O'Dwyer's tube, then the old operation is better, there being less danger of fatal obstruction, and the question of feeding giving less anxiety. The weight of testimony goes to prove that it is less work to take care of intubated than of tracheotomized patients. The time occupied in caring for the tube in the latter class is largely taken up in feeding the former class of patients.

Northrup's statistics of 107 autopsies, performed at the New York Foundling Hospital, go to prove that there is no such thing as "food pneumonia," as in no instance were signs of food found in the

smaller bronchi. Dr. O'Dwyer advances the opinion that the secondary lung affections, especially pneumonia, are due to retained secretions, which, owing to the presence of the tube in either operation, cannot be ejected by coughing. Others hold that this complication is due to the fact that the air enters the lungs without first being warmed and moistened by passing through the nasal chambers. The author ascribes these affections to the natural tendency of exudative processes to extend in all directions, basing the opinion upon the fact that pulmonary complications are as frequent in cases not receiving surgical treatment, run the same course, and are as fatal as in those in which operation is resorted to.

While a wound in the skin is objectionable on general principles, yet the wound of tracheotomy gives little trouble and does little harm. The diphtheritic poison gains admission to the system before the wound exists, and the course of the disease, as regards sepsis, is the same after as before the operation. In only 6 of the 327 operations at the City Hospital of Boston was diphtheria in the wound noted; 3 of these cases recovered. Both tubes may produce ulcerations in the trachea, but the result is seldom serious.

Conclusions.—1. Intubation may be tried in all cases of croup. 2. It is preferable in young children, and in cases in which the tube must be left entirely to itself. 3. It may be resorted to for euthanasia, provided the operator is reasonably expert and can do it without producing collapse. 4. Tracheotomy is called for in those cases in which intubation cannot be done, or in which it fails to give relief; or in which the laryngeal tube is repeatedly ejected, or requires frequent removal for cleansing. It may also be required in those cases in which sufficient food cannot be given while the O'Dwyer tube is in position. It is also preferable in cases situated at a distance from a surgeon capable of introducing the laryngeal tube. 5. The tracheotomy instruments should always be at hand in intubation in cases of emergency.—Dr. Gay in *Med. News.*

TIGHT LACING.

Amongst the various subjects to which the members of the British Association directed their attention at the late meeting at Bath, and upon which the ladies attending the Biological Section may fairly be regarded as competent to express an opinion, was the custom of women to wear stays. The discussion might have been considered a mere playful interlude introduced by Professor Roy and Mr. Adami to enliven the proceedings, were it not that trival subjects—trival, that is, from the Association's point of view—are most likely to excite the bitterest feelings. The wearing of corsets has really two aspects, which deserve separate consideration—the hygienic and the æsthetic. From the hygienic point of view, the question resolves itself into one of the degree to which the compression, or, as women say, the support, of the chest is carried, and the rapidity with which that degree is attained. The body as a whole, and the several organs composing it, have a wonderful power of accommodation to surrounding circumstances, permitting changes of form and even of position that appear at first sight incredible, without material impairment of function. If the form of so unyielding a part as the head can be greatly altered, with preservation of ordinary brain power, as occurs amongst many savage tribes, by pressure begun early and steadily continued, we may be sure that much more might be accomplished if similar pressure were applied to so mobile a part as the chest without greatly impeding the function if respiration. Such moulding of the form of different parts is familiar to all as effect of disease; and many a man or woman, after an attack of pleurisy terminating in empyema and adhesions, possesses an unsymmetrical thorax, which nevertheless serves him or her well throughout a long and active life. The body, in other words, permits considerable liberties to be taken with it without serious impairment of health; and if pressure of the chest were commenced in early childhood, and steadily persisted in, no doubt still greater deviation than is commonly seen could be induced. As a matter of fact, however, in this country such pressure is not applied; the stays given to girls by sensible mothers up to the age of fourteen or fifteen are soft, and exert little more pressure than the waistcoat of a boy. At that age, when the figure naturally changes, the firmer support is taken into use, and the amount of harm it occasions is dependent on the degree to which support becomes compression. There are no doubt many girls who, desirous of making themselves conspicuous and, as they foolishly believe, attractive, tighten their waists to such an extent as to incapacitate them for taking exercise and for the necessary ingestion of food; they consequently become weak, pallid, and chlorotic. These evils are, moreover, intensified by the rapidity with which the compression has been applied, and all who are interested in their welfare should exert themselves to point out the egregious folly of such a practice. Upon the æsthetic side of the question there is little to be said; here, as in so many other controversial questions, *de gustibus non est disputandum.* Amongst the Greeks, for ages the arbiters of taste, the women wore an apology for stays, and we are told that at a very early period the girdle was strengthened by metal, and long before the Christian era a broad band or belt was worn next the skin to support the breasts. According to Planche, the practice of tight lacing appears to have been introduced by the Normans as early as the twelfth century, and

has been in use ever since. We apprehend the ordinary Englishman, though he may wonder at, does not really admire a wasp-like figure. Both hygienically and æthetically, tight lacing is a mistake. Yet it must be remembered that, partly as a result of climatic conditions, partly from abundance of food and absence of severe work, and partly perhaps from the hereditary effect of sexual selection, a large preportion of the young women of England, of the middle classes at least, are disposed to the accumulation of fat in the breasts, and though from the age of seventeen to twenty-four the breasts may be firm and prominent, yet after that period they are apt, without artifical support, to become flaccid and pendulous. The advantage of support, however, is no argument for the employment of compression. Dr. Hoyle made a good hit in saying that no woman regarded herself as properly dressed unless she felt a little uncomfortable. He might have added that the proportion of discomfort experienced may be pretty safely taken as the measure of mischief being effected in the willing victim of tight lacing.—*Lancet.*

A LOCAL TREATMENT FOR VAGINISMUS AND VAGINITIS.

Vaginismus, as you all know, consists of a hyperesthesia of the nerves supplying the mucous membrane and muscles of the vagina, and its orifice, which upon being irritated produces a spasmodic contraction of the sphincter and other vaginal muscles. This condition may be due to functional or local causes, more often the latter.

Vaginitis is an inflammation of the lining membrane of the vagina, and it may be of a specific or a non-specific character. This disease is often connected with vaginismus. In the treatment of these troubles the first step is to remove the cause if this be possible. In vaginismus you are aware that it is not easy to introduce a speculum, or even the finger into the vagina, without considerable pain to the patient.

My method of proceeding in these cases is to place the patient on her back, the pelvis somewhat elevated and the knees flexed. I either introduce a bivalvular or a small cylindrical speculum, I prefer the former as on account of its flatness it is easier introduced. Before introducing it, however, I lubricate it with vascline, and then take a camel's hair brush and apply a four per cent. solution of cocaine both to the speculum and to the orifice. I then introduce the speculum into the vagina and very gently open the blades. By this means I give the patient very little pain. After placing a small roll of cotton beneath the speculum across the perineum, I pour into the vagina through the speculum, a solution composed of sulphate of zinc, one or two grains, chloral hydrate five grains, water and glycerine of each four drams. I wait several minutes and then withdraw the speculum slowly but not completely out of the vagina.

As I withdraw the speculum, the walls of the vagina come together and the solution touches every portion of the mucous membrane. I now push the speculum back again, and introduce a small cotton tampon with a string tied to it, pushing it back with a long dressing forceps, at the same time withdrawing the speculum. The tampon will absorb that part of the solution which remains in the vagina and that which escapes will be absorbed by the cotton on the perineum. I now place a piece of cotton between the labia, apply a bandage and the operation is completed. I let my patient remove the cotton and withdraw the tampon in from four to six hours afterward.

I repeat this treatment three or four times a week. After the first treatment, I have no need for the cocaine, as the finger or speculum can be introduced without giving much pain. In vaginitis I proceed in the same way, except I do not use the cocaine solution. In vaginitis the chloral acts as an anæsthetic to the mucous membrane and vaginal muscles. Between visits I have my patient to use vaginal douches of hot water with a little borax added to it. By this treatment I have secured excellent results, and my patients and their husbands (if they have any) appreciate it very much in vaginismus.—Dr. Guhman in *Weekly Med. Rev.*

INJECTIONS OF OSMIC ACID IN MUSCULAR RHEUMATISM.

In No. 24 of the *Russkaya Meditsina*, 1886, I published some cases of muscular rheumatism in which I had employed osmic acid in the form of hypodermic injections. These cases, though not very numerous, were tolerably characteristic, and bore out the suggestions first made, I believe, by myself, as to the advantages of a persevering use of this method of treatment.

At the commencement I employed osmic acid in quantities of from three to six drops of a one per cent. solution for a single injection—the same doses in fact in which it is recommended in cases of neuralgia. At the present time the doses given internally are from the one-sixtieth to a quarter of a grain per diem, and the hypodermic doses should therefore be about half as great. A very important case however that has occurred in my practice proves that these doses may with great advantage be increased. The case was that of a patient named Vikulin, belonging to the town of Maïkop, a merchant, thirty-three years of age, tall, of good constitution and well nourished, who for the last two years had suffered from severe pains in the dorso-lumbar region, especially on the right side, extending to the lower extremities and

being most felt in the right leg. These pains seemed to have their seat in the lumbar muscles; they were much increased by local pressure with the finger, as also during changes in the weather. The pain was so considerable at night that the patient scarcely got any sleep. No morbid physical signs could be made out either in the lumbar region or in the legs. For about two years the patient had suffered from difficult and painful digestion, due apparently to acid dyspepsia. The tongue was coated; the patient sometimes had a desire for food, but as a rule he ate little, because after even a scanty meal he had pain and tenderness in the region of the stomach which were increased by pressure; the bowels were confined; besides, he frequently had palpitation, due, as it seemed, to derangement of the digestive functions, the size and sounds of the heart being normal, and the palpitation coming on during or soon after a meal. The kidneys acted normally. During his two years' illness the patient had frequently had medical advice, but had derived but little benefit from it. When Mr. Vikulin first came to me for advice last winter complaining of lumbar pain, I gave him an injection of a Pravaz syringeful (about twenty-five minims) of a five per cent. solution of salicylate of cocaine in the lumbar region each day for three successive days. These injections were given in the morning, and for some hours afterwards the pain was much less, but at night it returned in all its old intensity, giving him no rest and being especially severe when he turned round in bed. I then determined to administer a fourth and final injection of the salicylate of cocaine, but by mistake injected instead a whole syringeful of a one per cent. solution of osmic acid, equivalent to about a quarter of a grain of the pure acid. Immediately afterwards the patient felt a severe burning pain in the lumbar region, and as this did not diminish in the course of twenty minutes while the man was lying on his face, I sent him home, without of course revealing my mistake to him, and told him to go to bed and apply cold compresses to the loins. I was much alarmed by the thought of the chances of phlegmonous inflammation or even sloughing, considering the large dose of osmic acid I had given. I was consequently much gratified by the patient appearing the next day with a cherful expression and the intelligence that he had had the first good night's sleep for two years, being able even to turn round in bed without pain. He said that the burning pain had only lasted for about two hours, and then had completely disappeared, so that he had not gone to bed or applied cold compresses as I had directed. On examination I found the skin very red around the puncture over an area the size of a hemp seed, and tender on pressure over an area the size of a florin, but with no appearance of swelling. After the patient went home I prescribed for his indigestion two grains of Finkler's papaïn with six of milk sugar, as a powder an hour after meals to be followed by a teaspoonful of a mixture containing bicarbonate of sodium, aromatic spirit of ammonia, carbolic acid and glycerine.

When the patient came to me the next time some three months later he reported that the pains in the loins and in the lower extremities had been less, and that his nights had been but rarely much disturbed. Upon examination I found that there was still a good deal of tenderness on pressure in the lumbar region. His digestion was perfectly normal, his appetite good, and there was no pain over the region of the stomach after meals; the bowels too were no longer confined. I administered three injections into the parenchyma of the lumber muscles of from eight to fifteen drops of a one per cent. solution of osmic acid on three successive days. At the present time, according to the account given by the patient when I saw him several months afterwards, the pain in the loins and in the legs have completely disappeared and he is able to walk easily and to sleep well.

The case has a scientific and practical interest, showing as it does that a whole Pravaz syringeful of a one per cent. solution of osmic acid may be injected into the muscular tissue without giving rise to serious consequences either of a local or a general character. At the present time I give in muscular rheumatism an injection, into the parenchyma of the muscle, of eight drops of a one per cent. solution of osmic acid and gradually increase the dose up to a syringeful, having regard to the different susceptibilities evinced by different persons especially women, to this remedy. Large doses of osmic acid have two advantages over small ones. First, fewer injections are needed, and consequently there are fewer punctures, and it is these that set up the burning pain which constitute the main objection to this mode of treatment, and secondly, large doses act more promptly and with greater certainty. These injections I administer both in chronic and in acute rheumatism without employing any other external or internal remedy. I have not had a single case either in private or in hospital practice where this treatment has not produced a considerable improvement, and in the great majority of cases complete recovery has taken place after two injections, in rare instances as many as six being required. I have not seen any cases where the affection has returned.

Let me now say a word or two about the action of papaïn, which proved so successful in the above mentioned case. In all cases of indigestion, in dyspepsia and in chronic cases associated with acid eructations with painful gastric fermentation I order—when the patient is well enough off to afford an expensive drug—Finkler's papaïn in not less than two-grain doses with milk sugar one or

two hours after meals. I direct these powders to be taken in a spoonful of the alkaline mixture mentioned before. This has a good effect on the pain occassioned by acid fermentation while chymification is going on, by neutralising the acid as it is formed. For this condition papaïn is unrivalled as a remedy; it causes hard food to be digested, and the fibrous tissue of meat and vegetables is dissolved by its means. I have by this method of treatment completely cured some long standing cases of dyspepsia of the most obstinate description, associated with gastric pain and with constipation. Of course I at the same time took care to attend to the general habits, and especially the food of the patients. The way in which Mr. Vikulin's case yielded to papaïn appears to be very characteristic.—*Pract.*

TEREBENE IN BRONCHORRHŒA.—Dr. John W. Martin, in a communication to the *Med. Press and Circ.*, August 29, 1888, says that he has employed terebene in three cases of bronchorrhœa, with marked success. His first case was that of a woman 79 years old, who had an attack of right hemiplegia, followed by a severe attack of broncho-pneumonia. At the decline of the inflammatory stage profuse bronchorrhœa set in, accompanied by a state of great exhaustion. A variety of treatment failed to give relief. In addition to the bronchial discharge there were urgent digestive troubles, dyspepsia, flatulent distension of the stomach and intestines, causing much inconvenience to the action of the heart, and seriously interfering with the administration of proper nourishment. The urine was free from albumin. Terebene was first ordered dropped on a lump of sugar, but this proved to be disagreeable to the patient, so that the following formula was substituted:

Gum terebene,	
Spt. chloroform	āā ɱx.
Mucilage of tragacanth	f℥i.
Syrup	f℥ss.
Water	q. s. ad f℥i.

Dr. Martin states that from the day the terebene was ordered there was a steady improvement of a most marked character. Of the other two cases one was a man, about 40 years old, suffering from passive broncho-pneumonic congestion, attended by profuse expectoration. The patient was very weak, and no treatment seemed to give relief until he was placed upon terebene. Immediate benefit was apparent. Marked diminution was noticable at the end of twenty-four hours, and expectoration ceased within three days. The further progress of the case was in every way satisfactory. The third case was that of a wine merchant's traveller, who had, at the outset, acute broncho-pneumonia. When the acute symptoms subsided, profuse expectoration remained a very troublesome symptom. Various remedies failing to check this discharge from the lungs terebene was ordered by Dr. Martin with rapid and most beneficial results. The expectoration almost disappeared at the end of the third day, and the patient steadily improved. In prescribing terebene or turpentine, he regards it as necessary to be careful to examine for kidney mischief. If such is present, he would regard it as a contra-indication to the use of terebene.—*Med. and Surg. Rep.*

THE LATE DR. JOHN MILNER FOTHERGILL:—Born of a stout dalesmen race, he might, by his vast personality, have been an exaggerated caricature of the wildest dream ever imagined by a satirist of the typical John Bull. Enormously stout, even as a lad, with a round, rosy face and long black hair, his great carcass, set upon sturdy legs wide apart, might be constantly seen at the university gate, a centre of all mirth and jollity. To him the students' hostelry was too well known. By many names he was called; some of his teachers will remember him as the "Pirate Captian." But with all his wild Bohemanism and his Falstaffian ways and bulk, any one who came in contact with him who had an eye to see recognized in him a man of commanding personality, with immense power of good or evil. The writer then a demonstrator once said to him: "Fothergill, you are a very clever fellow; why do you pretend not to be and waste your time?" "Do you think I am clever?" said he. "Yes, I know it." "Well then watch me and I'll try." And from that day to this, with all his oddities, rustic manners and intense self-consciousness, Fothergill showed himself to be a man of great ability, power of work, perseverance, and originality in expression, if not in experiment. A great and successful student he never was at the university, even after he began to work; he had wasted too much time for that; but he took his degree in 1865 with credit, passed the colleges, and then, after graduation, with a loyalty that did him much credit, he went home to Morland to assist his father in the rough work of a general practice in the Westmorland hills. His father was a quaint specimen of the old school, square-headed with a firmly knit frame, without the enormous bulk of his son, who, with native shrewdness, much kindness and the wisdom of experience, attended the stalwart dalesmen and statesmen of his native valleys.—*Ed. Med. Jour.*

CHLOROFORM.—After fairly trying most of the agents in use I now exclusively employ chloroform, and having for years kept an accurate record of its administration, and giving it freely and without stint in all sorts of surgical proceedings, never refusing its benefits to a single patient, no matter what his condition or the operation to be performed.

I have never had an accident except once, when an epileptic took a fit while being put under its influence, and died with a full and fixed chest. For speed and energy, for ease of application and agreeableness, for rapid recovery with little subsequent trouble, and for safety *when properly administrated*, chloroform is, in my opinion, unrivalled. That it needs no apparatus but a towel is a great point in its favor. This is the record of one who has administered it constantly almost from the time of its introduction into practice, and the statement in this sense may not be without its value. I never measure the quantity used, but exhibit in freely, and take the color of the lips and the respiration as my chief guides. Making the patient count at the begining of the administration is a most valuable aid; and Nélaton's invertion of the body with artificial respiration is, I think, the surest mode of resuscitation in danger from failure of the heart. A minute is about the average period for inducing insensibility; and it is very rare, if proper precautions are taken in the way of preparation and after management, to have any sickness. There is little doubt that "nervous" persons and those who are intemperate in the use of alcohol, tobacco, and narcotics, and also epileptics, require special care. Oversaturation from the too frequent renewal of chloroform induces, in my opinion, the chief after-trouble.—Dr. McLeod in *Brit. Med. Jour.*

THE MECHANICAL TREATMENT OF ERYSIPELAS.—The methods heretofore employed in the treatment of erysipelas may be divided into the medicinal and the operative. The former is, of course, the older, and it is to Kraske that the more modern method of scarification, the operative method, is attributed. He did not originally employ multiple scarifications in order to render more effectual the action of antiseptics locally applied, as was done later, but rather to relieve tension and to give exit to the septic fluids. Riedel modified Kraske's method by making incisions two or three inches in length on the borders of the erysipelatous area, instead of multiple scarifications in the diseased part itself. Both these methods have given good results, but they have some serious disadvantages. The incisions cannot be made on the face or other exposed parts, on account of the disfiguring scars which remain, and even when the disease is on the body, it is no light matter to the patient to be cut so often and in so many places.

A new method, called by the author the "mechanical" method, is proposed by Dr. Anton Woelfler, in an article published in the *Zeitsch. f. Ther* of July 15, 1888. He was led to its adoption from a consideration of Barwell's plan of covering the erysipalatous area with white paint. He found, however, that simply painting the part was not sufficient, but that it was necessary to cover the diseased skin with some waterproof material retained by a bandage. Further experience showed him that, when the bandage became loose, the erysipelas was very apt to spread, and he then adopted the practice of sealing the covering with traumaticin, a solution of guttapercha in chloroform. This answered the purpose of keeping the disease within bounds very well, as a rule; but in certain parts, where there were many inequalities of surface and where the skin was very movable, the erysipelas would occasionally escape from under the protective, necessitating an extension of the traumaticin dressing. The author then resorted to strapping with adhesive plaster, and had no futher trouble. He reports over twenty cases successfully treated with the traumaticim or adhesive plaster. The disease process was confined to the area covered by the dressing, the temperature speedily fell and the patient made a rapid recovery.

Dr. Woelfler regards the action of the compressive dressing as a purely mechanical one in preventing the invasion of new territory by the pathogenic cocci. It is probable, he says, that the microbe soon exhausts the material for its sustenance in the skin, and, unless it can spread to the neighboring healthy parts, it quickly dies. The operative methods prevent this spread by dividing the small vessels in the skin, thereby producing extensive capillary thrombosis and the pressure of the traumaticin or adhesive plaster exerts a similar restraining influence.—*Ed. Med. Record.*

ANTISEPTIC PRECAUTIONS IN INTERNAL URETHROTOMY.—Attention was drawn to the fact that this operation had been advocated for many years in certain cases of stricture which do not yield readily to dilatation, yet its principles had never been generally accepted by surgeons. He thought this was due partly to the fact that its results were not supposed to be good, and partly to the dangers of the operation itself. As to its results, he said it was often urged that the worst strictures were always those in which urethrotomy had been performed. Of course this was perfectly true, but it would be fairer to state that it was only the worst strictures that were submitted to urethrotomy. If strictures were neglected after the operation, they, of course, recurred, and this gave a certain currency to the idea that it was the internal urethrotomy that had made them relapse. The dangers of the operation, he said, were dependent upon septic fever, and this depended upon either self infection form a septic urethra or on dirty instruments. The latter source of infection could be easily guarded against by the thorough cleansing of instruments and cartheters, whilst the purification of the urethra was no easy matter. To effect this, however as far as possible

the urethra should be irrigated with sublimate (1 in 2000) for several days beforehand, and, upon the stricture having been divided, the bladder should be washed out with a similar solution, and then with hot water at a temperature of 105° F. Afterward, a catheter should be tied in for twenty-four hours. By this means the urine came very little into contact with the urethra, and septic infection was avoided. Fifteen cases were related in which the plan had been successfully tried by the author, and he alluded to some in which the plan had been suggested to other surgeons.

Mr. Swinford Edwards, in discussing Mr. Clarke's paper, said that in the last six internal urethrotomies which he had performed he had not only carried out the suggestions of Mr Bruce Clarke, but had administered boracic acid before the operation, and for a few days after, with a view of sterilizing the urine, as suggested by Dr. Palmer. In none of these cases did urinary fever supervene; but, brilliant as was internal urethrotomy, he believed that the time was soon coming when it would be almost, if not entirely, supplanted by electrolysis for strictures in the deep or fixed urethra which were unfitted for the simple treatment by dilatation.—*J. Bruce Clarke in Lancet.*

THE THERAPEUTICAL VALUE OF SALOL.—According to the most recent observations the principal effect of the administration of salol is to produce a marked and immediate remission of the pain in cases of acute rheumatism. Its effect on the temperature, however, is less marked than that obtained by means of the salicylate of sodium, and the relief afforded is of much shorter duration. In fact, unless the patient is kept well under the influence of the drug the suffering returns with its original intensity. Salol is, to all intents and purposes, innocuous, and is said never to give rise to toxic symptoms. Even the discomfort which not infrequently follows the internal administration of salicylate of sodium has not been observed with salol. Hence whenever the use of the former drug is contra-indicated, salol will be found both useful and reliable. The best effects were obtained with it in the treatment of sub-acute rheumatism, and the patients soon learn to appreciate the relief which follows its administration. Salol is insoluble in pure water, but is slightly soluble in organic liquids of alkaline reaction. It is best given in the form of compressed tablets, pills, or in an emulsion.—*Brit. Med. Jour.*

APPLICATION FOR BURNS.—As an application for *burns*, *Centralblatt für Therap.* suggests the following:

℞. Ol. olivæ, ... p. vj.
Salol, ... p. j.
Aquæ calcis, ... p. vj. M.

A convenient mixture for *Transient Anæsthesia* is suggested by the *Revue de Therap.*, May 1st, 1888:—

℞. Chloroform., ...
Alcohol., ...
Aquæ Cologniensis, . . āā . q. s. M.

In a case of *poisoning by aconite* and *belladonna*, reported by Dr. Bradley in the *British Medical Journal*, the patient recovered under the following treatment:—The hypodermatic injection of 0.1 gr. of apomorphine ten minutes after the accident, and the injection of ether to stimulate the heart.

A convenient formula for the administration of *Chloral with Morphia* is the following:—

℞. Chlorat. hydrat., ... ℥ij
Morphinæ sulph., ... gr. iss.
Syrup. aurant. cort., . . . f ℥j.
Aquæ destillat., ... f ℥ij. M.
SIG.—Dessertspoonful as directed.

A convenient method of *prescribing Tincture of Iron* in a mixture that is *not inky*, is the following:—

℞. Tinct. ferri chloridi, ... f ℥ij.
Potass. citrat., ... ℥ij.
Tinct. gentian. comp., . . .
Elixir. simplicis, . . .āā. . f ℥iij. M
SIG.—Two teaspoonfuls in water after meals.—*Coll. and Clin. Rec.*

RESECTION OF LARGE INTESTINE.—The patient was an enormously stout woman, weighing 250 pounds, and was seven months pregnant. An umbilical hernia of some standing came down and could not be returned. Her medical attendant put on a firm binder, and sent her into the Maternity Hospital, under the impression that the child was dead, and that she was about to miscarry. On arrival there her condition was at once recognized, and she was transferred to the infirmary. When admitted she was collapsed and *in extremis*. There was a large bright red tumor on the top of an enormous abdomen. An incision nine inches in length was made and the sac opened into. A gangrenous and burst intestine and gangrenous omentum were then found. The omentum, sac and sloughs of cellular tissue were removed, and fifteen inches of gangrenous large intestine cut away. The two ends were left at the umbilicus, no attempt being made to unite them. The woman was got back to bed alive, and fed per rectum. Thirty-six hours after the operation she gave birth with one pain to a child, which lived for several hours. Afterwards the woman made an uninterrupted recovery. She still defæcated at the umbilicus, but Dr. Cotterill hoped to remedy that by a second operation. The part of intestine removed was from the transverse colon.—*Ed. Med. Jour.*

HYDRASTIS CANADENSIS.—Hydrastis can. has been recommended for all forms of chronic metritis, for inflammations invading the tissues around and in the walls of the uterus, for inflammations of the ovaries, and for uterine fibroids; the growth of the latter, it is maintained, being not only arrested, but in many cases have been found to undergo retrogression under the use of hydrastis. Hydrastis certainly does restrain the flow of blood in myofibromata, but in case of menorrhagia where the loss of blood depends upon a para- or peri-metritis that its efficacy is most marked. It not only relieves the ovary-pain, but checks uterine hæmorrhages where there has been such evidence of inflammation outside and immediately around the uterus that intra-uterine medication could not have been attempted. The drug has in my hands had little or no effect upon uterine hæmorrhage dependent upon mucous polypi. I have found, however, that it soothes ovarian pain, acute or chronic, and checks the bleeding of the latter; it checks the bleeding of endometritis, and relieves that unpleasant pain which prevents the woman thus affected from either sitting or walking; it relieves and in many cases has arrested, the hæmorrhage due to puerperal metritis and chronic peritonitis; and in many instances it has relieved the headache so frequently complained of by women who are the subjects of chronic inflammatory affections in and around the uterus and ovaries.—*Lancet.*

THE TREATMENT OF PSORIASIS.—In spite of all the new forms of treatment introduced from time to time for the cure of psoriasis, some of which have their special application for certain cases, Vidal believes (*Jour. de Méd.* No. 10) that for the generality of cases we find in the oil of cade a superiority which forces us to come back to it again and again. By its use it would appear that recurrences are less frequent. The following formula is given:

R.	Glycerole of starch, ...	100.
	Green soap, ...	5.
	Oil of cade, ...	100. M.

This makes a soap much easier of application than the oil of cade alone. It should be applied each night and a flannel night-dress worn, which is only changed at long intervals. In the morning a bath with tar soap is to be taken; and, if desirable, the odor of the tarry preparation is removed with some perfume.—*Jour. of Cut. and Genito-Urin. Dis.*

TREATMENT OF TYPHOID FEVER.—In compliance with the request of the Sydney Board of Health, Dr. W. Pierce, medical superintendent of the Coast Hospital, has reported upon the treatment of cases of typhoid fever, of which the rate of mortality during the first five months of the present year has been unusually low. Dr. Pierce, in his memorandum, states that, in cases received within the first ten days of the disease, calomel (three to five grains) is administered; and after that acetanilide, in five-grain doses, whenever the temperature exceeds a certain point (101° to 103°), up to six or eight times in the twenty-four hours. The effect of this is to cause a fall of temperature in about forty minutes, attaining its minimum in from two to four hours, with concomitant fall in pulse and respiration rates, with decrease of arterial tension and profuse sweating. The tendency to delirium is diminished, and there is "a remarkable feeling of ease and repose, which appears partly to depends on the production of a certain amount of peripheral anæsthesia." When the effect of the drug passes off, the temperature often rises with great rapidity. He considers this treatment to have many advantages over cold bathing. He has given the drug continuously for several weeks, and has not found it contra-indicated, even when there were cardiac complications. It renders the course of the fever milder, but it may not lessen the duration of the disease. In all cases where it is freely given there is liability to occasional cyanosis of extremities and face, with irregular pulse. Alcohol was given very sparingly, and generally only in cases of failing heart; and Dr. Pierce thinks that the prolonged use of alcohol is very injurious. He also describes the measures employed to combat the various complications. At the meeting at which the report was read the Board of Health passed the following resolution: "That the Board of Health desire to record their appreciation of Dr. William Pierce's very able report on the subject of typhoid fever, and the reasons which have led to the small mortality in the Coast Hospital, of which institution he is the medical superintendent, during the first five months of the year 1888."—*Lancet.*

ERYSIPELAS AND TUBERCULOSIS.—As the result of experiments, M. Solles concludes that erysipelas retards the evolution of experimental tuberculosis in the guinea-pig; the animals may survive twice as long as when erysipelas is not produced in them. This survival is all the more remarkable since experimental tuberculisation in the guinea-pig causes a general tuberculosis, which is much more rapid and much more serious than human pulmonary phthisis. The antituberculous action of erysipelas is double: it has a general influence, as shown by the prolongation of life; and it has a local influence limited to the erysipelatous area, causing the induration, ulceration, and lymphatic swelling due to the tubercle to disappear. This localised action, clearly antagonistic to tubercle, is of such a nature, argues M. Solles, as to encourage the search after some parasite which shall have

the power of destroying the bacillus tuberculosis. —*Lancet.*

CURE OF RUMINATION.—Dr. Alt reports a case at Hitzig's hospital at Halle. The digestion of albumen was extremely rapid, while the digestion of starch was checked, and amylaceous matter had to be returned to the mouth, in order to be properly mixed with saliva. The treatment consisted in large doses of alkaline medicines, washing out the stomach, giving albuminous food, and galvanizing the œsophagus. In a fortnight this condition (which up to the present has been looked upon as incurable) was completely removed.—*N. Y. Med. Abs.*

QUACKS PREFERRED.—The French medical press gives a curious instance of preference for quacks. A provincial magistrate received complaints that a certain person was practicing medicine illegally. The quack admitted that he practiced, but produced a diploma showing that he was Doctor of Medicine of the Faculty of Paris. He explained that while he was unsuccessful as a legitimate practitioner, as soon as he consealed the fact that he was a graduate, and posed as a quack, his fame began to spread, his income grew, and he saved and invested a considerable sum of money. He begged the magistrate to keep his secret, being sure that if it was known that he was a qualified man he would lose all his practice.—*Journal Med. Assoc.*

CHRONIC SYPHILITIC SALIVATION.—A. W. Furber, M. D., L. R. C. S. and L. D. S., says:—I have for a long time had a—gentleman—patient under my care for the disease of the teeth, and although my operations progressed favorably, I had many difficulties to contend with. The whole of my patient's teeth appeared to have a syphilitic taint, and with increased flow of saliva, amounting to chronic salivation. These were not the only troubles I had to surmount; but that which retarded my work most was the repeated recurrence of syphilitic ulcers of the sulcus and gums generally, which, though not painful to my patient, was still a source of considerable discomfort and militated greatly against the success of my operations. Iodia having come under my notice, I was inclined to give it a trial, and with the addition of a small proportion of liq. hydrarg. bi-chlor., taken daily before meals for a time—also used occasionally as a mouth wash—the salivation became normal, the mucous membrane assumed a more healthy state and the teeth generally looked like coming back to their original color.

DANGERS ATTENDING A TOILETTE OF THE PERITONEUM.—In reporting a case where a thirteen pound tumor of the right ovary was removed, the author called attention to the fact that the washing out of the peritoneal cavity with warm water was not devoid of danger, and often causes the stoppage of respiration. In two of his cases the respiratory act was re-established with difficulty: in another, death from failure of respiration occurred. He thinks this action is due to the direct effect of the water upon the diaphragm or solar plexus, and that is more apt to occur when the water is hot.

He advises, first, that the patient be placed in a semi-recumbent position, with the chest more elevated than the pelvis, in such a way that the "lavage" may be confined to the pelvis and lower abdomen, no water being able to reach the diaphragm; second, that the irrigating fluid should never be above the temperature of the body; third, that the state of anæsthesia should be carefully watched at the time of "lavage."—*Le praticien*, Sept. 3, 1888.

TO PREVENT RUST ON INSTRUMENTS.—It is said *(Med. Rec.)* that if steel instruments be immersed for a few moments in a saturated solution of potassium carbonate, they will be effectually prevented from rusting.

THE BALL IN HOXAWATTOMIE.

Dedicated to Prof. Vaughan, of Ann Arbor.

There was a sound of revelry by night,
And Hoxawattomie had gathered then
Her beauty and her chivalry, and bright
The lamps shone o'er fair women and brave men.
A thousand hearts beat happily, and when
The cream was served in a voluptuous ice,
Soft spoons made love to spoons that answered them again.
And everybody said, "My, but it's nice."

An hour passed on; all Hoxawattomie,
Disporting in the waltzes, felt a pang
Right in the midriff—could it be pie
Or, was it possibly, the peach meringue.
Perhaps the wormy chesnuts some one sang
On the piano, that had made them sick.
Whate'er the cause, certes, the entire gang
Desired a doctor, and desired him quick.

"On with the dance," the village druggist cried,
"No sleep till morn when youth and pleasure meet:
Of stomach ache no mortal ever died,
Let's chase the glowing hours with flying feet.
Hark! did ye hear the rattling in the street?
The doctor's carriage—can old foxy con
The lurking poison in a cream so sweet?
He can, he can, high Heaven, it's tyrotoxicon!"

And then there was a hurrying to and fro,
And gathering tears and symbols of distress,
And cheeks all pale that but an hour ago
Blushed at the tale of their own loveliness,
And there were sudden gripings, such as press
The very stuffing out of love's young dream,
And with a frantic universal guess
All shrieked; "It was the cheese-germ in the cream"

—*Leonard's Medical Journal.*

THE CANADA LANCET.

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TORONTO, NOVEMBER, 1888.

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ALBUMINURIA.

The fact that albumen is frequently found in the urine of persons who have, in the ordinary acceptation of the term, no kidney disease, is gradually becoming accepted by the profession as true. Doctors are very often worried by patients who have had the ill fortune to discover that their urine contains albumen, this being looked upon by the laity as a sure sign of "Bright's disease" and consequent early death. Their forebodings are all poured out to their attending physician, who must be strong indeed in the confidence of his patient if he can let him know that there is albumen in his urine, and yet convince him that he need not fear death from immediate kidney trouble.

The insurance companies almost universally reject an applicant who has this symptom, and, perhaps, with our present knowledge of what may be termed extra-renal or false albuminuria, and "physiological albuminuria," they are quite justified in so doing. At any rate, it is probable that a medical man would require to *know well* the standing of a practitioner who might recommend such an applicant for insurance if he, the first medical man, were personally responsible for the amount of the insurance policy issued.

The careful diagnostician will take into account the various conditions outside the kidney before he concludes that albumen, even in a considerable amount, means structural change in that organ. The fact that he can truthfully say to his patient, who by some means has discovered that this dread substance is present, that it may not be from his kidneys at all, will be a great comfort to both physician and patient.

In the false albuminuria the proteid found in the urine is not true serum albumen, derived directly from the blood as in true albuminuria, but is the result of some inflammatory or ulcerative process going on in some part of the genito-urinary tract outside the kidneys, as, for instance, pus, which is indeed nearly always the chief factor in producing this spurious kidney disease. Such pathological conditions as urethritis, purulent catarrh of the bladder, pyelitis, and such less important and circumscribed morbid conditions as ulcerations, small glandular abscesses, cancer, tubercle, and various forms of neoplasm may furnish elements such as blood, pus, or debris which, either singly or combined, will give the albuminuric reaction.

The Germans speak of a "physiological albuminuria," which differs from the false species above accounted for; in which there appears to be a congenital deficiency in the power of the glomerular epithelium to resist the passage of albumen through it. The question as to whether, in such cases, there is any tendency to the development of renal disease can not be considered settled, though such authorities as Leube and Fürbringer consider, as does Moxon, perhaps, that a young man who has albumen in the urine, say only occasionally, and in the forenoon, should be a good risk for life insurance. Hilton Fagge states that both Fürbringer and Moxon detected hyaline casts in one instance of this physiological albuminuria, so that, says he, "casts cannot be taken as conclusive evidence of serious mischief in the kidneys."

Dr. Shepherd lately presented to a meeting of the Connecticut Medical Society, an elaborate statistical report on albuminuria (*Jour. Am. Med. Assoc.*), compiled from examinations made on supposed healthy men. He covers all the ground and gives his conclusions as follows:

"1. Albuminuria is much less frequent in the United States than in England, Stewart giving thirty-one per cent. as the general average, while ours, conducted on a larger scale, show but two per cent. 2. The brain workers, rather than the muscle workers, show the largest percentage of

albuminuria. 3. The urine of perfectly healthy people rarely shows albumen after food, while those who suffer from albuminuria and oxaluria are very liable to show it. 4. Privation, scanty food and clothing, with insanitary surroundings, increase the liability to albuminuria. 5. Cold bathing does increase the liability to albuminuria, though more notably so in the case of dyspeptics. 6. Severe exercise increases this liability in a very moderate degree. 7. In the large majority of cases albuminuria is not associated with kidney disease. 8. In the matter of life insurance, albuminuria should be looked upon as a symptom only, and acceptance or rejection of the risk should depend on the gravity of the cause. 9. The existence of any such condition as physiological albuminuria is extremely improbable."

The doctor will be supported, we think, by the majority of the profession in protesting against "physiological albuminuria." The term is unscientific, and the idea does not accord with what we have been taught to consider physiological processes, notwithstanding the eminent authorities mentioned above.

VACCINATION AGAINST CHOLERA.

Dr. Gamaleia, of Odessa, has been experimenting for a considerable time on the action of the cholera bacillus upon animals. Lately at a meeting of the Paris Académie de Médecine, M. Pasteur read a communication from him (*Br. Med. Jour.*), in which he states that he has discovered a method of vaccination, which will be to cholera what Jenner's vaccination is to small-pox, namely, preventive of the disease. He found that, contrary to Koch's idea, the cholera germ is inoculable in the lower animals, and that its virulence becomes very greatly intensified by conveying it to pigeons after it has passed through the guinea-pig. "After passing through several pigeons, the microbe acquired such virulence that one or two drops of the blood of an inoculated bird sufficed to kill healthy birds in from eight to twelve hours, whilst an even smaller dose proved fatal to guinea-pigs. If the virus obtained after passing through pigeons is cultivated in nutrient broth and is afterwards exposed to a temperature of 120° C. for twenty minutes, it will be found that there is left in the sterilized culture a toxic substance which produces characteristic phenomena in animals. If 4 cubic centimetres of the sterilized broth be injected into a guinea-pig, the animal's temperature gradually falls, and death takes place in from twenty to twenty-four hours. Pigeons die in the same way, but require a larger quantity, namely, 12 cubic centimetres injected in one dose. On the other hand, if the same quantity of the sterilized fluid is injected, but in two or more doses given at intervals of a day or two, they do not die, but are found to have become refractory to cholera to such an extent that even half a cubic centimètre of the most intense virus (the blood of an inoculated pigeon) is not fatal to them. Guinea-pigs are still more easily vaccinated by injecting the sterilized broth in doses of 2 cubic centimetres once or twice repeated. Dr. Gamaleia has found this *chemical* vaccine of unfailing efficiency and perfectly innocuous. He admits that he derived the idea of it from a paper of M. Pasteur's on chemical vaccine of rabies, and from Dr. Roux's experiments on septicæmia." Dr. Gamaleia shows his full trust in the efficacy of thus preventing the attack of cholera, by offering to test it on himself, and afterwards going to regions where cholera prevails in order to show whether his discovery will be in man, all he thinks it will be. M. Pasteur's laboratory is to be placed at the Dr.'s disposal, for the purpose of carrying on his experiments.

SIR MORELL MACKENZIE AND THE GERMAN SURGEONS.

It is a pity that so great a man as Sir Morell Mackenzie should have stirred up so unseemly a controversy as the one going on between him and the German surgeons. His fame was surely established on a sufficiently firm basis to enable him to pass over in silence their ungracious, unprofessional and sometimes contemptible remarks. Not only is this generally recognized as true, but it is believed that his hands have been tied by persons of high estate, who, for reasons not entirely understood, have controlled Sir Morell's actions, and have said when he should speak if not indeed what he should say, or rather what he should *not* say. And knowing all this, as well as that no amount of reasoning could convince the prejudiced Germans that he was right and their own countrymen were wrong, would it not have

been more seemly and more politic to have suffered in silence, secure in the esteem and admiration of his own countrymen, and of the whole world, Germany excepted? How many a professional man of low degree has learned thus "to suffer and be strong" under undeserved blame, obloquy and persecution even, only those who are in the profession know.

The question of damages for the learned German professors seems to be *in nubilus*, but we have not heard, nor perhaps shall we soon hear the last of this quarrel.

The surreptitious acquisition of the proof sheets by some smart journals is another phase of the affair which does not reflect credit upon their management; and indeed the whole matter, from beginning to end has, we believe, been a mistake, and one which may be far-reaching in its results, and out of which no good can possibly come. The handling of the German physicians was so rough, that they would have been more than human if they had not struck back with all their power and venom even, and it yet remains to be seen which of the parties to the controversy have the best of it, if indeed any decision ever be reached. But perhaps our readers have had a surfeit of the subject. Certain it is that the daily papers have not spared space to place the points of the contest before the public, and no doubt every one in the profession at least, has his own views on the subject. We shall therefore forbear inflicting our readers, further than this notice of a subject which is attracting so much attention at the present time.

THERAPEUTIC NOTES.

For insomnia and restlessness of typhoid at night, Prof. Janeway recommends morphia sulph. $\frac{1}{6}$ gr. given in hot milk at ten o'clock in the evening, and he has found this of more service than any other hypnotic.

For diarrhœa of typhoid, or in fact any diarrhœa, he strongly recommends salol, thus:

℞.—Salol, ... ʒij.
Divide in chart No. xii.
Sig.—One every four hours.

This in its passage through the alimentary canal is converted into salicylic and carbolic acids in the intestines, and thus acts as a direct antiseptic and prevents sepsis of the bowels, and in his experience, is the best internal antiseptic we can use; it is also claimed that it has a decided empirical effect in checking diarrhœa. A case of violent diarrhœa was recently admitted to the hospital, and the first day the movements numbered 24; salol was then prescribed and the second day the number was reduced to three, and on the third day no movement.

Prof. W. H. Thomson begins the treatment of every case of typhoid with bismuth and pepsin and continues it throughout the whole course of the disease, claiming that as the stomach is the seat of parenchymatous degeneration, gastric digestion needs assistance, which is obtained by the pepsin, and bismuth controls gastric disturbances and irritations. During the course of all fevers, the entire alimentary secretions are checked, and thus the system is deprived of its natural antiseptics and as a result fermentation is set up, which causes the diarrhœa. Here the indication is to give intestinal antiseptics and he prefers bismuth, as having given him the best results.

℞.—Bismuth subnit., ... ʒij
Pepsin, ... ʒj
M. et divide in chart No. xii.
Sig.—One t. i. d.

For vomiting of pregnancy, very good results have been obtained from ʒss-ʒj doses of fld. extract viburnum prunifolium. It has been extensively tried in Bellevue and other city hospitals. In a series of eight cases, in which it was recently given in ʒj doses, a uniformly successful result was obtained. It seems to have a direct action on the uterus itself, thus preventing the reflex irritation which results in vomiting. In some of the hospitals all other remedies have been discarded.

For uræmic dyspnœa, Dr. Roosevelt recommends cobalt nitrite in $\frac{1}{4}$ grain doses, repeated every hour, until the characteristic nitrite headache is produced, and then discontinued.

For the same affection and for urgent uræmic symptoms of all kinds, Dr. Porter gives $\frac{3}{4}$ grain of pilocarpine hypodermically, and claims to get rapid relief. He believes that the drug acts as a vasomotor stimulant and increases blood pressure, and that the lethal effects of the drug are due to the

usage of too small a quantity, which acts in a directly opposite manner, and paralyzes the vaso-motor system and thus causes lowering of blood pressure. Dr. Porter relates several interesting cases, but his views have not been adopted generally.

THE LESLIE FUND.

The following letter, sent us by Dr. White, of Hamilton, explains itself:

37 Main St. W., Cor. Park, Hamilton,
20th Oct., 1888.

JAMES WHITE, ESQ., M.D.,
8 Cannon St., Hamilton.

DEAR DOCTOR,—Allow me to thank you for $461, which has been handed to me by you, for the purpose of contributing towards defraying the legal expenses incurred in defending the persecution lately raised against me. While I regard this practical proof of feeling as given in support of a cause, rather than personal, I am at the same time deeply sensible of the heartfelt sympathy manifested to me by a great many of my professional friends, not only in this city, but elsewhere.

I thank you personally for all your kindness, and thus through you, those who, regardless of their own time and trouble, espoused my cause and assisted me in it with their wise counsel, their sympathy and their moral support.

I am, yours sincerely,
JAMES LESLIE.

THE USE OF CALOMEL IN PNEUMONIA.—Dr. McManus, in the *Medical Record*, gives the result of the treatment of sixty-two cases of pneumonia by early large does of calomel. His statements are rather startling, especially the dose, which would generally be considered heroic. He says:—

My method is to give from thirty to sixty grains of calomel at the first dose; and in every case, unless it be given too late in the disease, it will bring down pulse, temperature and respiration in from six to eighteen hours.

I do not believe it to be of any use to give it after the fourth day of the disease; and I think at or near the crisis it will do harm. I cannot help thinking that if I had been able to give the next to the last case I have described the calomel two days earlier, he would not have run on to fibroid phthisis. And I cannot help believing that I diminished that man's chances to whom I gave the twenty grains near the crisis. Further, it does not seem to act so well in cases where the patients have been chronic drinkers. It does them good—diminishes pulse, respiration and temperature—but their convalescence seems to be much slower. It may be urged that all of my cases were not true pneumonia; but I think I could hardly make a mistake in all of sixty-two cases I have given it, with good effect, in two cases of pneumonia occurring in the puerperal state; and I have given given it in one case of pneumonia in a pregnant woman, and had the pleasure of seeing her recover promptly without aborting. I afterwards delivered her of a healthy male infant, three months after her attack of pneumonia.

DEATH WITHOUT DISEASE.—Stories of death having taken place without injury to the organism and simply by the effect of the imagination have been long familiar, but have been regarded as more or less apocryphal. That of the negro who was condemned to be bled to death by a slave council, and who without being at all injured was led to believe he was bleeding by warm water being poured over his arm, and by the remarks of the by-standers, he being blind-folded, is perhaps typical of all such cases. It is said that the man *actually* died. He was told he was dying, and when the beholders lifted the bandage from his eyes they were horror-stricken to find that he was indeed gone.

In this connection the following from the *Med. and Sur. Rep.* will be of interest:—Boston papers tell of "the singular death, at Danvers, of Miss Emma Felch. She was taken ill some months ago and, from the fact that her mother died of cancer, she became possessed with the idea that her sickness was from the same cause. Her physicians could find no indication of cancer, but she asserted she had one, and located it. She refused food, saying it distressed her. At her desire, after she died, an autopsy was held, and no cancer could be found. It was decided that her disease was purely sympathetic."

This points a moral as to faith cure, the use of infinitesimal doses, etc.

THE CAUSE OF ECLAMPSIA AND ALBUMINURIA.—The etiology of this dread condition of the pregnant woman may be considered as yet, *sub judice*

Of the many theories advanced none seem to account for all the facts observed under them, and so cannot be looked upon as satisfactory. Santos, *Archiv für Gynak.*, has made a study of fifty-three cases in Buda-Pesth clinic, and has concluded from such study that the albuminuria is caused by a reflex irritation of the sympathetic and renal nerves due to the increasing distention of the uterus, and the irritation of the uterine nerves by this distention, and subsequent contraction. He considers it physiological in pregnancy, and diagnostic of pregnancy. This accounts for the more frequent occurrence of albuminuria in young women, in whom reflexes are most easily excited. Any condition heightening the general reflexes favors albuminuria. Santos regards eclampsia as an "acute peripheral epilepsy," whose genetic zone is the uterus. Upon this basis he readily explains the action of narcotics, and rare cases in which eclampsia occurs without albuminuria.

ERGOT IN INCONTINENCE OF URINE IN CHILDREN.—A writer in the *Med. Analectic*, says: I have been using for many years the fluid extract of ergot in the treatment of incontinence of urine in infants and children; and I almost regard it as a specific for the disease. I prefer to give it simply, and to treat separately any conditions of the patients that may require therapeutical aid to correct those states of physical debility which either predispose to incontinence of urine or aggravate its presence. I give to an infant from one to three years old, 5 to 10 drops; and to a patient from three to ten years, 10 to 20 drops every three hours. Few children object to its taste, and it should be continued uninterruptedly for two or three weeks, and resumed if the disease should return, in which case the doses ought to be gradually increased.

LACTIC ACID IN THE DIARRHŒA OF TUBERCULOSIS.—We have recently noted the good results obtained from lactic acid in certain diarrhœas of children. It has been found valuable also in the diarrhœa attending phthisis. The idea seems to have been suggested *(Lyon Méd.)* by the good results obtained by the administration of this drug in other tubercular troubles, notably ulcer of the larynx and tongue. It has been found necessary to administer it in doses of from 90 to 120 grains in divided doses during the twenty-four hours. The gastric disturbances and roughness of the teeth caused by this amount may be obviated by adding half a drachm of chlorodyne to the solution. Excellent results have been reported in nine cases.

FOR SEAT WORMS.—The following mixture is said *(Med. News)* to be highly efficient:

R.—Tinct. rhei.	. . . .	gtt. iij.
Tinct. zingiberis	. .	gtt. ij.
Magnesii carbonatis.	.	ʒ iv.
Aquæ	. . . . .	ʒ iij.—M.

This amount to be given three or four times daily, according to the effect produced.

The rhubarb may act as a vermicide or as an agent which simply detaches the worms. In either event it causes the expulsion of great numbers of them and induces regular bowel movement.

BIRTH PALSIES.—In a clinical lecture by Gowers *(Lancet)* birth palsies are divided into peripheral and cerebral. The former are generally of the facial nerve and of the nerves supplying the arms. They are not of a severe nature and recover spontaneously. Cerebral palsies occur most frequently after first and difficult labors. Extravasation of blood over the cortex, or at the base of the brain, is the usual condition, resulting in death or tedious recovery. In diagnosis, symptoms of severe injury or defective development of the nervous system are present, without history of definite onset. Chronic spinal disease is rare in children. In birth palsies, reflexes are excessive; in muscular diseases, they are not increased. Prognosis: tendency to slow improvement. Treatment by drugs, by electricity and tenotomy is useless. Rhythmical gymnastic training, with hygiene, is of value.

PUERPERAL PERITONITIS, DRAINAGE.—Dr. Woodword (Boston *Med. and Surg. Jour.*) reports a case of puerperal peritonitis, which came under his care about six weeks after labor. There was a large amount of pus in the abdomen, an abscess having burst into the abdominal cavity thirty-six hours before labor. He performed laparotomy, evacuated a large amount of offensive pus, and irrigated the cavity with hydronaphthol, 1-1100, introduced a drainage tube and dressed the parts antiseptically. He freqently irrigated the cavity with warm water. The patient recovered.

NASAL ECZEMA.—This affection is said (Herzoy, *Archiv. Fur. Kind.)*, to be found in persons with a strumous diathesis. Chronic rhinitis is present in all cases. The junction of the skin and mucous membrane is most attacked. The disease is peculiarly intractable when it attacks the inner side of the point of the nose. It is frequently followed by furuncles. Erysipelas frequently accompanies it. The crusts should be softened and removed. Yellow mercury oxide ointment, or equal parts of lead ointment and vaselin accurately applied to the affected part, give good results. The chronic rhinitis also needs treatment.

FOR CHRONIC PHARYNGEAL CATARRH.—The following is recommended (*Brit. Med. Jour.*) for the above complaint:

℞. Menthol (in fine powder), . . . ʒ ss.
Ammon. chlorid., ... ʒ jss.
Pulv. acid. boric., ... ʒ j. M.

Pinches of this may be taken frequently into the nose in the form of snuff, and drawn back into the throat, this method being especially indicated when there is atrophic rhinitis (ozœna) also present.

AMENORRHŒA.—Professor Parvin prescribes *(Am. Med. Dig.)* the following in some cases of amenorrhœa in anæmic subjects, and the result, in many cases, has been gratifying:

℞.—Ferri sulph. ex.,
Terebinth. albæ,
Pulv. aloes, ... āā gr. j.—M.
Ft.—Pil. 1. Sig.—One t. d.

The quantity of aloes may have to be reduced.

NEW DRUGS—Dr. W. Ellis, in the *Am. Pract. and News*, in a paper on "New Drugs," says that antipyrine in doses of grs. x to xx, or antifebrin in doses of grs. iii to x, will relieve the worst case of neuralgia or migraine, in from twenty minutes to one hour, without any bad after effects. Another use of these drugs is in the treatment of chorea, which is cured in one quarter or one eighth the time required by the usual remedies. M. Legroux treats all his cases of chorea by gr xv. t.i.d. Dr. Thor, of Bucharest, says that vii to xxx grs. of antipyrine, just before retiring for the night, is superior to any other method of treatment for nocturnal emissions and sexual neurasthenia, and Dr. J. P. Griffith, of Philadelphia, gives antipyrine the first place in the treatment of whooping-cough.

SAPRÆMIA.—Dr. Wm. S. Gardiner in the *Med. Reg.*, says that four objects should be kept in view in the treatment of Sapræmia, viz.: (1). To keep the cavity of the uterus clean, which he does by antiseptic intra-uterine injections of corrosive sublimate, 1 in 4000, at the temperature of the body; and by keeping in a drainage tube when the temperature is high. (2.) Secure tonic contraction of the uterus by xv to xx ♏ doses of fl. ext. of ergot every two or three hours, the dose being regulated by the effect. (3.) To control the temperature, and he finds antipyrine the most suitable remedy to reduce excessive body heat. (4.) To support the patient by nutritious diet.

DELIRIUM TREMENS.—Dr. L. B. Anderson, Va., *Gaillard's Med. Jour.*, in writing of the pathology and treatment of delirium tremens, refers to cases not affected by hypnotics, as opium, potassium, bromide, etc. These are cases resulting from very excessive ,prolonged drinking, and which result in exhaustion and collapse from the excessive and long-continued cerebro-spinal irritation. They are laboring under torpid liver. and distension of the gall-bladder, with black, viscid, acrid bile. A twenty gr. dose of calomel relaxes the ducts, enables the bladder to discharge its contents, excites the functions of the acini, relieves the blood of its vitiated freight, and unloads the bowels, and the patient becomes enabled to sleep in a few hours. A teaspoonful of cayenne-pepper, and then x grs. every hour, while awake, gives the same result in the majority of cases.

DIPHTHERIA AND CROUP.—Dr. Galicier, of Versailles *(Am. Pract. and News)*, lauds the use of sulphuret of calcium, in large doses, in the treatment of diphtheria and croup. He also associates digitaline and quinine with it. To a child one year old, he gives sulphuret of calcium from one to two centigrams per hour, digitaline and the arseniate of quinine from one-half to one milligram per hour. For a child of two years, sulphuret of calcium two to four centigrams per hour, digitaline and arseniate of quinine from one to two milligrams. After the age of 4 years, sulphuret of calcium five centigrams, digitaline and the arseniate of quinine from one to two milligrams. They are administered in the form of granules. A case that is cured in 8 to 15 days, by the ordinary treatment, is cured thus in two or three days.

DYSENTERY.—Surgeon Major Dobie, of India (*Am. Pract. and News*), treats dysentery by small doses of ipecacuanha, with Dover's powder and cannabis Indica, repeated often enough to produce nausea, and to check the irritability of the rectum and the tenesmus. Locally, he uses an enema of nitrate of silver, consisting of six grs. to six ounces of water. The patient may retain it or not; as a rule he does not. One enema generally allays the symptoms for the day. The bowels have rest, the stools become feculent, and a warm bed and diet complete the cure.

LOTION FOR PIGMENT SPOTS OF THE SKIN.—The following is given by Unna (*Le Clin.*) as useful:

Oxide of bismuth,
Rice starch, ... āā 2 grs.
Kaolin, ... 4 grs.
Simple glycerole, ... 10 grs.
Distilled rose-water, q. s.

Put this mixture on the pigmentary spots and let it dry. Bathe carefully before making the application.

SALICYLATE OF BISMUTH.—This remedy has been found (Ehring, *Archiv. Für. Kind.*) very useful in the gastro-intestinal catarrhs of children depending upon fermentation. It combines the astringent properties of bismuth with the disinfectant properties of salicylic acid. The formula used by Ehring is:

℞.—Bismuth salicylat., ... ℥j.
Glycerini, ... ℥ss.
Aq., ... āā ℥iv.—M.

S.—℥j, more or less, according to age, every two hours.

PIGMENTATIONS IN PREGNANCY.—The following is said to be useful (*Jour. Cut. and Genito-Urinary Dis.*):

℞.—Cacao butter,
Castor oil, ... āā ℥ iiss.
Oxide of zinc, ... gr. v.
White precipitate, ... gr. ij.
Essence of rose, ... gr. ij.

M. S.—Apply morning and night.

REMOVAL OF PROF. OSLER.—Dr. Wm. Osler has resigned the Chair of Clinical Medicine at the University of Pennsylvania, having accepted that of Practice of Medicine at the John Hopkins University, of Baltimore. This change will, we trust, be as satisfactory to the learned professor as he can wish. His many Canadian friends congratulate him, and wish him God speed in his new field of labor.

THE management of the Medical Library Association are to be congratulated on having brought their labors to a completely successful istue. The rooms at the College of Physicians and Surgeons, will be open on and after Nov. 1st from 10 to 1 a.m., and from 2 to 6, and 7.30 to 9.30 p.m. The supply of literature already on hand is considerable, consisting of about 1000 volumes and 5000 pamphlets; while there will be found on the tables eighteen or twenty weekly or monthly journals on various subjects, connected with the science of medicine.

CONVULSIONS IN CHILDREN CAUSED BY OPIUM.—It has been proved (Roth *Bull. Méd.*) that very small doses of opium may cause fatal convulsions in infants. The fœtus may be affected, as shown by Roth, who gives a case in which a pregnant woman distinctly felt almost unendurable fœtal movements after rather large doses of opium. He thinks therefore that opium should not be used to prevent abortion.

FOR INFANTILE CONVULSIONS.—The following mixture is recommended (*Jour. de Méd. de Paris*). Tincture of musk, tincture of castorium, sulphuric ether, each 32 minims; paregoric, 8 minims. Six drops are given each hour in a teaspoonful of sugared water or a teaspoonful of milk. The doses are less frequently repeated as improvement takes place.

HICCOUGH.—It is said that the best means of stopping hiccough is to take a very deep inspiration and hold the breath as long as possible. If the breath can be kept past a rising singultus the trouble is, as a rule, over.

MR. LAWSON TAIT read a paper at the Brit. Gyn. Society, in which he brought forward such an amount of evidence to show that removal of the ovaries and appendages has no effect on the sexual appetite, so that surgeons need not now hesitate, on this ground, to remove them when they are obviously diseased.

Books and Pamphlets.

A Text Book of Pharmacology, Therapeutics and Materia Medica. By T. Lauder Brunton, M.D., D. Sc., F.R.S., etc. Lecturer on Materia Medica at St. Bartholomew's Hospital, etc. Adapted to the U. S. Pharmacopœia by F. H. Williams, M.D. Third edition. Philadelphia: Lea Bros. & Co., 1888. $5.50, cloth; $6.50, leather.

This classic on materia medica has so rapidly run through its second edition as to leave little time, says the author, for improvement. Suffice it to say that it is incomparably the best and most scientific work on the subject in the English language, or, so far as we know, in any language. It would be futile to attempt to point out the many new excellencies of this most excellent book, but we may simply mention that the physiological action of drugs is illustrated by new engravings in such a way as to render the author's meaning clear; that the action of microbes upon the living organism is presented fully and yet tersely, and that the latest views regarding the action of anæsthetics on the nervous system have been introduced. Dr. Brunton is so well and so widely known as an indefatigable worker in the domain of pharmacology that any further notice would be superfluous.

A Dialogue against the Fever Pestilence. By William Bullein, from the edition of 1578, collated with the earlier editions of 1564 and 1573. Edited by Mark W. Bullein and A. H. Bullein. Pp. 145, paper, 10*s*.

AND

The Anatomie of the Bodie of Man. By Thomas Vicary, Serjeant of the Surgeons to Henry VIII., Queen Mary, etc.; Master of the Barber-Surgeons Company, etc., etc. The edition of 1548, as re-issued by the Surgeons of St. Bartholomew's in 1577. Edited by F. J. Furnivall, M.A., etc., and Percy Furnivall. Pp. 336, paper, 15*s*. London: N. Trübner & Co., 57 and 59 Ludgate Hill.

These works of the Early English Text Society are extremely interesting to the medical man, illustrating, as they do, the condition of medical science at the time they were written. No one need expect to gain much knowledge of the germ theory of disease, or of laparotomy from their perusal, but we guarantee that many a pleasant half hour will be spent by any professional man into whose possession they come, in conning the quaint sayings and conceits of those old worthies of medicine.

Manual of Obstetrics, Gynæcology and Pediatrics. By Kenneth N. Fenwick, M.A., M.D., M.R.C.S. Eng., etc.; Prof. Obstetrics and Diseases of Women and Children, Royal College of Physicians and Surgeons, Kingston; Surgeon to the Kingston General Hospital. Pp. 267. Cloth, $2. Toronto: Carveth & Co.; Kingston: Henderson & Co.

In the preface the author says:—The object of this book is to furnish an outline of the main facts in Obstetrics and the Diseases of Women and Children, and includes a synopsis of the physical signs of Diseases of the Chest and Diseases of the Skin. It is really a syllabus of my sessional lectures, with such additions and alterations as I thought would make it more valuable for reference in emergencies. While seeking to meet the wants of medical students in general, and my own class in particular, the work does not pretend to originality, nor does it aim at supplanting the larger text books on the subject, which are not always within the reach of every medical student.

In January, 1889, there will be issued from the press of A. L. Chatterton & Co., New York, a new quarterly, entitled "The Journal of Ophthalmology, Otology and Laryngology." It will be edited by George S. Norton, M.D., assisted by Charles Deady, M.D. Subscription price, $3 per year. The Journal will be devoted to original articles upon the three specialties.

The Fifteenth Annual Report of the Secretary of the State Board of Health of the State of Michigan, for the year ending June 30th, 1888.

Contains much useful information. The State Board of Health is to be congratulated in having so scientific and earnest a worker as Dr. Baker for its Secretary.

Births, Marriages and Deaths.

On the 29th October, Dr. Alexander Forin, to Winnifred Fair, both of Collingwood.

At Newmarket, Ont., Oct. 15th, Stanley Scott, Esq., M.D., aged 50 years.

THE CANADA LANCET.

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Original Communications.

PROPHYLAXIS AND TREATMENT OF INFANTILE SUMMER DIARRHŒA.*

BY DR. MILLER, TORONTO.

The variety of diarrhœa to which I propose to call your attention occurs during the summer months, and almost exclusively among children under two years of age who are artificially fed.

Eustace Smith says: "In bottle fed infants this disease is especially common, and is answerable for a large part of the mortality which occurs in cities during the first twelve months of life. Severe inflammatory diarrhœa appears to be almost confined to large towns, and the mortality from this cause is greatest during the months of July, August and September.

It is now generally admitted that the exciting cause of this disease is the presence of micro-organisms, or ptomaines in the alimentary canal, or the irritating, or poisonous substances which are formed in the processes of fermentation, or putrefaction, which are induced by these. The reason assigned for the prevalence of this disease only during the summer months is that a temperature of 60° F., or higher, is requisite for the active multiplication of germs.

The age at which this disease occurs being the period of first dentition explains why teething has in the past been considered one of its causes, but it is evidently only a coincidence, and not in the relation of cause and effect, as teething is a purely physiological process, many children passing through the whole period of dentition without having diarrhœa. If teething could produce it, it would be as common during the winter as during the summer, whereas, it never occurs during the winter.

It is a well-known fact that children artificially fed are more subject to this disease than those nursed at the breast. Meinert, of Dresden, found in 500 cases only 20 cases among breast-fed children. Hope, of Liverpool, in a record of 1,000 deaths from infantile summer diarrhœa, gave the number of breast-fed children as only 30, or three per cent.

For artificial feeding, cow's milk is mostly used, and it has generally been thought that the difference in chemical composition between it and mother's milk was the reason why it did not agree as well with children as the latter.

However, Escherich found that when cow's milk was fed to an infant ten weeks old in quantities of one quart per day, an examination of the fæces disclosed an almost perfect digestion of the casein. This experiment has been repeated by others who testify to its correctness.

Cow's milk rarely disagrees with children during the winter, although the chemical composition remains the same throughout the year. Not so however with the bacteria which are present in large quantities during the summer, but almost entirely absent during the winter, as evidenced by the fact that milk can be kept for a long time during the winter without undergoing any change.

Ordinary market milk, which is that used in infant feeding in cities and towns, is well known to be loaded with bacteria during the summer months. In fact, from the time that it leaves the udder it is contaminated with impurities at every step until it reaches the consumer. In the case of breast milk the child receives it directly from the breast, and when the mother is healthy, the milk is free from germs. Escherich proved this by drawing milk directly from the milk ducts into sterilized capillary tubes under proper antiseptic precautions, and sealing these tubes hermetically; he found that this milk could be kept for a number of days exposed to the temperature of the body without undergoing any change. Ordinary market milk, when placed in similar tubes and subjected to the same temperature, decomposed within a few hours. Professor Vaughan, of Ann Arbor, tried a similar experiment upon cow's milk. He found that it also was sterile as it came from the milk ducts. I think it is quite evident that if mother's

* Read before the Toronto Med. Society, Nov. 17th, 1888.

milk was subjected to the same unsanitary influences before its administration to the infant that cow's milk is, it would produce injurious effects just as often as cow's milk does.

As micro-organisms enter the alimentary canal of the child almost exclusively with the food, the most important feature of prophylaxis must consist in rendering the food pure or free from germs.

In the case of adults almost all articles of diet are rendered sterile by the process of cooking. In infants artificially fed no such precautions are taken. The milk is variously prepared by dilution, sweetening, warming, but not sufficiently heated to destroy the germs, and as ordinarily administered is loaded with these, and sometimes even partially decomposed.

The most appropriate food for infants under nine or ten months is undoubtedly the mother's milk, and I think the reason why it is the best is because it is free from germs, but unfortunately, for various reasons, we are often deprived of this, and compelled to resort to artificial feeding, and when this is necessary cow's milk properly sterilized is no doubt the best substitute. There are many processes recommended for its preparation. Jeffries, of Boston, in the May number of *Am. Jour. Med. Sciences*, gives the details of upwards of forty experiments tried by him to test the advantages to be obtained from steaming the milk. He concludes that steaming for fifteen minutes renders it practically sterile. I shall only mention the result of one of his experiments which will show how impure ordinary milk is, as well as what he claims the process of steaming will accomplish. From the milk just as he received it from the dairy he prepared two cultures each containing one drop of milk. On the seventh day he examined and found that one of them contained 1,644, and the other 1,391 colonies of bacteria. Some of the same milk received by him at the same time was put into flasks and steamed for fifteen minutes. The flasks were then corked and set aside for twenty-four hours, when four cultures were prepared from this steamed milk, each, as in the former instance, containing one drop of milk. Upon examination on the third day he found that no bacteria were present. Upon the eleventh day they contained respectively 0, 1, 3 and 10 colonies, all of the same variety of bacteria. He says this process of steaming can be carried out in any ordinary steamer with a perforated bottom and tight-fitting cover, the bottles containing the milk being placed inside and the steamer placed over a pot of boiling water. After the steaming is completed the bottles of milk should be placed on ice until required for use.

He says "The secret of the success of this method lies in the well-known fact that the vegetative forms of bacteria succumb to a moist temperature of 212° F."

Other authorities, however, among whom may be mentioned Schroeder and Pasteur, claim that steaming is insufficient, and that boiling at a temperature of 266° F. for thirty minutes is required to render milk sterile.

The process of Soxheet, for which he has devised a special apparatus, consists in placing the milk in bottles, being filled to within an inch of the top, then placed in a tray and set into a vessel containing cold water, this is placed over the fire and when boiling has continued for ten minutes the bottles are to be tightly corked, after ten minutes further boiling the bottles are removed and placed upon ice till required.

The same indications can, however, be fulfilled without any special apparatus by taking an ordinary self-sealer and putting the milk into it, placing it into water and heating, after the milk has begun to boil the cover can be placed on the sealer and the boiling continued for ten or twenty minutes, the sealer is then removed and placed upon ice till required. I have found this process very satisfactory. I am also in the habit of having the milk peptonized, before using, with Fairchild Bros. & Foster's extractum pancreatis.

Rubber tubing should never be used on feeding bottles owing to the impossibility of cleaning it properly. Nipples to fit directly to the bottle answer fully as well and can be kept clean.

The infant should also receive its meals at regular intervals, about every two to four hours during the day, according to age, and once or twice during the night. The amount at each meal to be from two to four ounces. When an attack of indigestion or colic occurs a dose of castor oil and withdrawal of all foods for a few hours will generally be all that is required. The nursery should be properly ventilated and the child kept thoroughly clean.

With regard to the treatment of infantile s—

mer diarrhœa, the usual classification of these cases is into simple diarrhœa, inflammatory diarrhœa and cholera infantum. The first two are very much alike, the difference being of one degree; in both, the disease is largely due to the local irritating properties of the bacteria. The extreme depression which is sometimes seen in these cases, often out of all proportion to what might be expected from the vomiting and purging present, and which may continue after these have ceased, and even cause death, are probably due to the absorption of some of the poisonous products of fermentation or putrefaction of the food substances present in the intestinal canal. In cholera infantum the cause is, no doubt, the absorption of poisonous ptomaines affecting principally the nervous system, probably the sympathetic.

Professor Vaughan has traced some of these cases to the poisonous action of tyrotoxicon or ptomaine discovered by him; he has been able to isolate it and finds that the symptoms which it produces when administered to some of the lower animals are identical with those of cholera infantum. It is found in connection with the butyric fermentation. I believe milk is the only culture in which it will grow. He considers it necessary to abolish milk entirely from the dietary in these cases.

The treatment of infantile summer diarrhœa is generally begun with a grain of calomel or gray powder, followed by a dose of castor oil to remove all irritating substances that may be present in the alimentary canal. When the stomach is very irritable a small mustard blister may be applied to the epigastrium for a few minutes. Ice in small pieces held in the child's mouth assuages the thirst. A linseed meal poultice to the abdomen has a soothing effect and protects from sudden changes of temperature. For the first twenty-four or thirty-six hours the diet should be restricted to barley water in small quantities, repeated as indicated. Some form of opium is generally required, Morphine being probably the best. Eustace Smith recommends that it be administered hypodermically.

The internal administration of antiseptics has many advocates; indeed, before bacteria were looked upon as the cause of this disease, the treatment had taken a distinctly germicidal tendency.

The preparations of mercury, calomel, bichloride and gray powder are recommended for their antiseptic properties, in small doses, frequently repeated. Salicylate of sodium, naphthallin, creasote, carbolic acid and many others have been recommended, but the difficulty with all these is that the dose must be so small to avoid irritant or poisonous effects, that what is taken is so acted upon by the digestive fluids and other substances present, that they become so diluted as to be almost useless, or are entirely broken up into new compounds. Salol is said to decompose into carbolic and salicylic acids after reaching the small intestines; if this is the case, it should be particularly adapted to these cases. I believe the expectations which were entertained of it have not been realized, as it has been found to be very uncertain in its effects, sometimes producing wonderfully good results, at others producing no effect whatever.

Another remedy which possesses antiseptic properties, and owing to its insolubility acts as a protection to the inflamed mucous membranes, is bismuth in the form of the sub-nitrate or sub-carbonate. It is certainly a very useful remedy in these cases, and can be given in considerable doses to quite young infants.

Epstein recommends washing out the stomach by irrigation when the presence of irritating substances is indicated by nausea and vomiting.

Baruch recommends irrigation of the rectum and colon, with sterilized warm water, by means of a fountain syringe and long rubber tube with catheter attached, the infant being placed upon its abdomen, across the mother's knee, and the catheter being cautiously introduced till it reaches the flexure of the colon, he believes that the entire colon may be washed out by this means, thus removing bacteria and all irritating substances present. This should be a useful procedure, as by mortem examination in these cases it is found that the seat of greatest inflammatory action is the lower part of the ileum and the entire colon and upper part of rectum.

When the temperature in the rectum reaches 102° or 103°, cold sponging or even cold baths are recommended. In extreme prostration Eustace Smith recommends warm mustard baths.

With regard to the diet nothing but barley water should be given for the first twenty-four or thirty-six hours, then peptonized meat broths

may be administered, and later, sterilized, partially digested milk may be used. Stimulants are generally required, the best form of stimulant being whiskey, and it might be given as soon as signs of exhaustion show themselves, and in sufficient quantities to relieve these.

THE AMERICAN HIP-SPLINT.*

BY DR A. B. JUDSON, NEW YORK.

In the present Congress, the first held in America, it will not be thought inappropriate to devote a short paper, chiefly historical in its character, to the American splint for the treatment of hip disease.

This apparatus was first described by Dr. Henry G. Davis and Dr. Lewis A. Sayre, in the April number of the *American Medical Monthly*, published in 1860. These two surgeons wrote independently, but by a curious coincidence they both described a new splint which was recognized as an important invention, not only in this country, but especially in England and France, where it was known as the American splint. Under this name it has been described and discussed by Edwards Barwell, Holmes, Marsh, Adams, and many other eminent European surgeons.

It will be interesting to inquire whether the name American has been rightly given to this apparatus? As first described, in 1860, it has two important features. (1) A perineal strap or ischiatic crutch-head, for the purpose of keeping the weight of the body from resting on the affected limb, the patient being thus enabled to engage actively in ordinary pursuits while wearing the splint and (2) adhesive plaster applied with the view of making traction on the limb.

In regard to these two features, ischiatic support and traction by the use of adhesive plaster, the first was not an American invention, nor was it a novelty. Support of this kind has been used for a long time in the construction of artificial limbs, and even in the treatment of hip disease the possibility of so supporting the body had occurred to M. Ferdinand Martin, a wood-cut of whose splint in found in Bonnet's "Treatise on the Diseases of the Joints," published in 1853.

But when we come to consider the other remarkable feature of this splint, we recognize a real advance in mechanical surgery, and one which may rightly be called American. The use of adhesive plaster for prehension of the limb, in the treatment of fracture of the long bones, was an American invention, and the transfer of this device from the treatment of fractures to that of hip disease was first effected in the new splint. For many years it had been a common practice in the treatment of hip disease to make traction with the long splint for fracture of the femur, prehension of the limb being made by a gaiter, or fillet or handkerchief

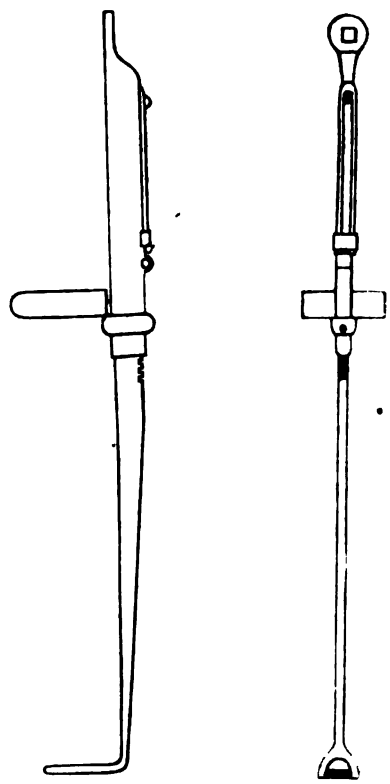

Fig. 1—.Front view. Fig. 2.—Side view.

placed around the ankle. These instruments of torture were supplanted in the new hip splint by the absolutely comfortable and convenient adhesive plasters. Thus we see that the new splint was a combination of an old device, ischiatic support, with an American invention, traction by adhesive plaster, and as the happy combination was made in America, it is not strange that the courteous attitude of European surgeons toward the surgery of a comparatively new country, led them to call the new method the American method, and the new splint the American splint.

*Read before the Ninth International Medical Congress, Washington.

Following the history of the hip splint in this country for the past twenty-seven years, one is amazed at the great number of the so-called improvements that have been made upon it. The most important has been a perfecting of that part of the apparatus which provides for ischiatic support of the body in standing and walking. The first splint did not extend to the ground, but depended on the integrity of the plaster adhesion for keeping the weight of the body from resting on the inflamed joint. Dr. Edmund Andrews, of

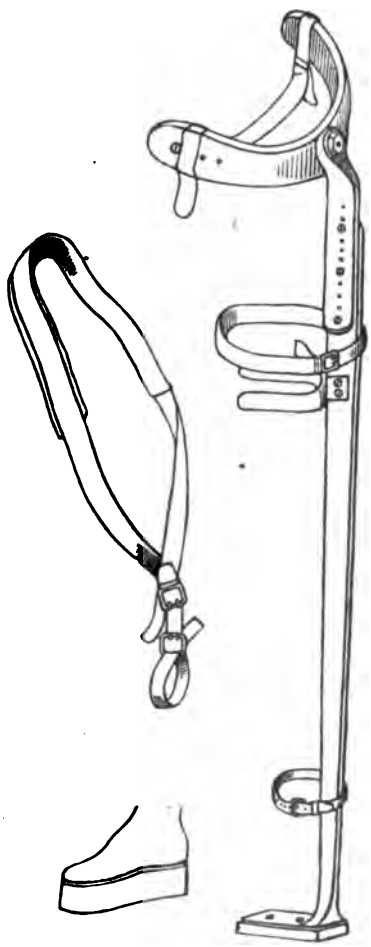

FIG. 3.

Chicago, and Dr. C. Fayette Taylor, of New York, proposed and perfected an extension of the splint to the ground, and thus left but little to be desired as an ischiatic crutch. Aside from this great improvement no essential changes have been made. Experience and increasing light have shown that certain things which it was thought that the splint accomplished are mechanically beyond its reach, and that some things supposed to be desirable and even necessary to proper mechanical treatment are of no importance whatever. The two things which the splint does to-day, and which it has done ever since the improvement above mentioned, the two functions of the splint, so to speak, are (1) to make the effected limb a pendent member, resembling in this respect the arm, when the patient is erect, which it does as an ischiatic crutch, and (2) to apply traction to the distal member of the joint, which it does by its rack and pinion and adhesive plaster. Traction protects the joint from the traumatisms of motion, muscular or otherwise, and the ischiatic support protects it from the traumatisms of standing and walking, while the patient runs about and follows the ordinary pursuits of life for the months and years necessary to bring about a recovery with restoration of ability and symmetry, so far as may be.

I will close by briefly referring to two points of practical utility. The first is in regard to an early diagnosis, which is especially of great importance, inasmuch as there is reason to believe that if treatment can be begun sufficiently early the focus of osteitis in the cancellous tissue may be resolved before the other structures of the joint are involved. Reason for this belief is found in the fact that disease of the joints is comparatively rare in the upper extremity, where a focus, being in a pendent member, may undergo resolution, protected, as it is by the nature of the case, from the traumatisms which assail the lower extremity in standing and walking.

Now, if the lower extremity can be made pendent, as can easily be done by the use of the hip splint, in the very incipiency of articular osteitis of the hip, before the articular contours are changed and before the circumarticular muscles are seriously involved, we may look for resolution of the osteitic focus and recovery without lameness or impairment of motion.

To assist in making an early diagnosis in a doubtful case a careful study should be made of those limitations in the motions of the joints which become apparent only when the extremes of normal motion are approached. This may be done in various ways. I have found two methods easy in practice and certain in their revelations. The first method applies to rotation, which is a

direction in which limitation of motion first takes place. Let the patient lie supine with the feet slightly apart. With the hand placed lightly on the knee of the unsuspected limb a rocking or oscillating motion is given to the whole limb, outward and inward rotation following each other, while the toe sweeps through an arc of nearly 180°, the inner border of the foot striking the table, and the outer border nearly reaching that level. This occurs in the well limb. A similar manipulation of the suspected limb may reveal a slight limitation of rotation, the result of hip disease. The other simple procedure relates to flexion. Let the patient, still on the table, sit up and kiss the knee. By flexing the neck and back and drawing the limb up with the hands this can easily be done with the unaffected limb, while the attempt to do it with the suspected limb may reveal a slight limitation of flexion indicative of hip disease.

Another diagnostic sign, too little thought of perhaps, but of importance in the very early stage, has recently been referred to by Dr. A. J. Steel, of St. Louis, Missouri, as "a brawny thickening about the joint in front of the capsule or behind the trochanter." There will in some cases be found a condensation of the soft tissues, due apparently to the vicinity of osteitis, not visible, perhaps, but recognized by palpation or pinching with the thumb and finger, and then often not detected, excepting by comparing the two sides. It will be found that a smaller pinch of the skin and underlying tissue can be made on the well than on the effected side. These tests are to be used, of course, in connection with other diagnostic helps and with due regard to other conditions which have the power to produce similar phenomena. Properly used they may betray the presence of hip disease in a patient as yet entirely free from pain and lameness.

The other practical point which I would emphasize relates to the position of the limb. Adduction is most to be dreaded. It causes tilting of the pelvis and apparent shortening, which, although technically *apparent*, produces more disability and deformity than the shortening which is called real. It is due, as a general thing, to the fact that the patient uses the well limb more than the affected one in walking, putting the former forward in less time than the latter, and unconsciously keeping the affected limb off the ground more than half of the time, and drawing up and adducting it in order to make it less of an impediment. To remedy and prevent this, the patient during and after treatment, should be drilled in rhythmical walking, which compels the affected limb (protected by the splint during treatment) to do its full share of the work of locomotion, and leads the patient unconsciously to thrust the affected limb down and to abduct it so that it may be in the best position to receive the weight of the body, and do its half of the work of progression. It is gratifying to witness a recovery in which real shortening is more than counterbalanced by apparent lengthening. Although this may be the case when the patient is discharged, the abduction, which is so favorable a feature, is likely to disappear and give place to abduction, with its disability and deformity, if the gait is allowed to become habitually irregular.

Figures 1, 2 and 3 will give an idea of modifications made in the hip splint by the writer.

In closing, I would deprecate a tendency to complicate the mechanics of the hip splint. If its true functions, which are few in number and simple, and the limitations of its usefulness, are duly recognized, it will be found a most useful and convenient appliance.

CASE OF PUERPERAL ECLAMPSIA TREATED WITH PILOCARPIN AFTER OTHER REMEDIES HAD FAILED.

BY DR. K. IRVING, KIRKTON, ONT.*

Mrs. C., primipara, the patient whose treatment is about to be described, is a blonde, 21 years of age, of active nervous temperament, of rather slender build, not the typical eclamptic woman of authors. Previous to her marriage I treated her on one or two occasions for anæmia and headache. Since her marriage I had not seen her till called to attend her in confinement, but understood from her friends she enjoyed good health up to that date. This occurred on the morning of the 15th of Nov. last. When I arrived I hurriedly washed and warmed my hands, for the cries of an infant told me the child was born. On reaching the room I found the young parent in a most happy frame of mind (congratulating her mother on being grand-

*Read before the Ont. Medical Association, June, 188

mother), and on seeing me she laughingly chided me for not arriving sooner, asking me at the same time if I did not consider her very smart; I answered in the affirmative, and told her to keep perfectly quiet as she seemed rather excitable.

The nurse remarked that the after-birth was still there though the child had been born an hour, and pains were severe. After warming my hands in hot water I told the patient we were going to see if the after-birth was ready to come away. Examination proved the uterus to be firmly contracted and placenta in the vagina. While removing it patient said, "Doctor, I am going to faint," and at once went into a convulsion. I immediately injected, hypodermically, ¼ a grain of morphia. The convulsion did not last long and consciousness was soon restored; then I gave her 40 grs. pot. bromid., by mouth. In twenty minutes the second convulsion came on, when I again repeated a ¼ gr. of morphia, hypodermically, and sent for assistance. When consciousness returned, gave 35 grains more pot. bromide. She now complained of pain in the head. In one hour and fifteen minutes she took the third convulsion, which was longer in duration than the others. The 4th came on in forty-five minutes after the third.

Dr. Rollins, of Exeter, now came to my assistance, and we gave her an enema of 80 grs. chloral and 30 of pot. bromide, and another hypodermic of ¼ gr. of morph. Consciousness did not return after the fourth. We drew off the urine from bladder; examined it and found it laden with albumen, although there was very little swelling of legs or ankles. The fifth convulsion followed at 9.30 a.m., about thirty minutes after the fourth. The face was now livid and swollen, the eyes turned upwards, one inwards and the other outwards, the pupils somewhat dilated, the pulse very rapid. The eighth convulsion came on at 12 o'clock. We gave her 4 drops croton oil, although the bowels had been freely moved through the night. The convulsions continued unabated, and at 2 p.m. we gave ⅛ gr. morphia, and then resolved to bleed her. She was anæmic, but we thought bleeding might relieve the venous congestion, and in this way bring relief. With difficulty we drew from both arms from sixteen to twenty ounces of blood without effect, except that the pulse was made somewhat more compressible. The convulsions still continued.

The breathing was, if possible, more stertorous and labored, the face and body were perfectly dusky. Coma very marked. We concluded our patient would, in all probability, die. I had spoken about pilocarpin as a remedy in those cases; had gone over the success achieved in such cases by Dr. McKeough as related by himself at the Chatham meeting of the Dominion Medical Association, and on the strength of which I had secured and carried about with me a bottle of Wyeth's tablets, so as to be ready should occasion require. All other remedies had failed and we now concluded to try the effect of pilocarpin. I hurried home for it; for now when wanted I found I had left it, as the Dutchman did his anchor, at home. When I returned about 5 p.m. I was greeted by one of the attendants in tears, telling me she was dying. Dr. R. had said she was. We gave a hypodermic of one-third of a grain, this just as a convulsion was commencing. In about eight minutes the skin began to get warmer, and the color began to change. The skin became moist, a condition which soon gave place to a most copious flow of perspiration. The salivary and bronchial discharge was something which astonished me. Napkin after napkin became saturated, and with a piece of cloth on the finger, or on a stick, we helped to remove the flow. It poured out of the nostrils as well as the mouth. It seemed sometimes, it is true, as though she would be smothered; but then would come an involuntary effort which, with assistance, would expel the discharge. She had two convulsions after the action of the drug began, the first much slighter than those preceding, and the last so slight that very little contortion of the face occurred, and it soon passed off. From the time the medicine began to act the pulse and temperature began to fall. The rapid change in the skin from a dark and dusky, to that of a healthy hue, was as remarkable as the bronchorrhœa. The perspiration and bronchorrhœa continued unabated for four or five hours then gradually disappeared. Then the breathing became gradually less stertorous. About five the following morning she roused to partial consciousness and was able to recognize me. She dropped off into a quiet slumber and about nine woke up perfectly conscious, complaining of a curious feeling in her head as well as pain, and of a very sore tongue. She had no recollection of what had transpired on the previous morning or day.

She recovered without any further puerperal trouble.

Here is a case in which I think we are justified in concluding that the morph., pot. bromid., chloral and bleeding did no good, and that when death seemed inevitable, pilocarpin was used with advantage. In this case, at any rate, I feel convinced it saved a life, acting first as a nerve sedative then relieving vascular tension and the convulsions, as well as secondly ridding the system, by the emunctories, of the urænic poison. Dr. Barker protests against its use as a remedy in those cases, principally from its depressing effects, and because of the danger of smothering from the excessive bronchial flow during coma. Here was a case where coma was deep, yet she did not smother. If depression appears too marked have we not remedies at hand such as ether to control those depressing effects. Notwithstanding its condemnation by such high authority as Dr. Barker, I think it is a drug which, when used properly, should rank as one of the first in the treatment of puerperal convulsions.

Correspondence.

OUR NEW YORK LETTER.

From our own Correspondent.

NEW YORK, Nov. 22nd.

M. Tarnier has devised an apparatus called a "Hatching Cradle." It consists of wood, sixty-five centimetres long, by fifty high, and thirty-six wide, with sides twenty-five millimetres thick. Inside the box is a partition which divides the incubator into two chambers. This partition is horizontal, so there is an upper and a lower chamber.

Dr. A. M Thomas, of the State Emigrant Hospital, has had one of the incubators made. A tank that is suspended in the lower chamber holds about fifteen gallons of water. The object of not fitting the tank tightly in lower chamber, but having it suspended in the middle, is that it gives a free circulation of air in this chamber. Between the main, inner and outer walls is a space of four inches, filled with sawdust, closely packed. Two tin tubes, one inch in diameter, connect the tank with a small cylindrical reservoir outside of box, from the top of which the tank is filled. The upper tube is exactly even with the top of the tank, and the lower one some six inches below it. Beneath the tin reservoir an alcohol lamp supplies the heat. The cold water goes to the bottom of the tank, and the warm rises in the reservoir and passes through the upper tube into the tank. The cold water passes through the lower tube again until all the water is of a uniform heat. The water can be drawn from the tank by means of a faucet at the bottom. A small door, packed with sawdust, opens into the chamber where the child lies. This chamber has a temperature of ninety-five degrees Fahrenheit. In the top of the incubator is a plate of glass one foot square. Looking through this the child can be seen.

As far as I know this is the first incubator made in this country, and it has proved a great success. On September 7th, 1888, there was a baby born, which, as near as could be ascertained was not much, if any, over twenty-eight weeks, and weighed two pounds and thirteen ounces. In thirty-six hours it had lost ten ounces, and at this time was placed in the "hatching cradle." It was first fed on mother's milk, given to it with a dropper, then it began to improve, and showed an inclination to nurse, and a small nipple was placed in its mouth and mother's milk was dropped into the nipple, and it has made steady improvement and at this writing it weighs four pounds four ounces and a half. There is every reason to believe that the child will continue to improve, and will soon be taken out of the incubator and the mother will nurse the child. The mother's milk has been kept flowing by letting her nurse a strong baby. This incubator is not convenient for private cases. In the first place it is too expensive, but it is very convenient for maternity hospitals, and I can safely say it is the best made at present.

There is a good deal of discussion among medical men at present, about what determines the sex. Prof. Charpentier says, that beyond the established facts, there is comparatively little known. One of the facts is, that the absolute or relative age of the parents had a real influence in producing a certain sex in embryo. When a man was ten years older than his wife, while she was still in the active period of production, there would be more boys than girls born to them, and also the parent that had the most energy determined the sex of the child. Bidder drew his conclusions after making a thorough investigation of

very large number of cases: 1. That every young primipara might be expected to have mostly boys. 2. That a primipara of middle age would have mostly girls. 3. That primiparæ after the middle period or life would have more boys. The multipara follow the same rule, but cease to have boys sooner. That the sex came from the male or female quality of the ovum. The male ova were most likely to be fecundated in youth. Afterwards, during the fullest activity of the woman's sexual life, the female eggs were most numerous and most likely to produce, and this became less and less probable, as time went on, when the male element or tendency again predominated.

Dr. Charpentier's good advice to physicians is, when asked what the sex is going to be, ask the mother what she wishes for and then predict that the opposite sex is the one to be looked for. In this way if it turns out as he has predicted, he gets great credit for his knowledge, and if the physican is wrong the mother is so overjoyed that she can easily forgive the physician.

In the obstetrical department of the State Emigrant Hospital, the women in the waiting ward are carefully watched, their urine examined three times a week, measured when there is any albuminuria, and when she goes into the "pony room," she receives a thorough bath with bichloride of mercury $\frac{1}{1000}$, and then a vaginal douche of $\frac{1}{1000}$ of the same drug. After labor she gets another warm douche of bichloride $\frac{1}{4000}$, then a binder is put on; then a T bandage holding in place a pad of antiseptic gauze and jute, this is changed every four hours for the first forty-eight hours and if the discharge show through then it is changed oftener and after forty-eight hours the dressing is changed every eight hours, and the woman is moved into the ward with other cases. Immediately after labor she is put in what is called the forty-eight hour room. In this way there has been but one death in five hundred cases of labor, and that was a case where the woman had phthisis. In my next I will give you something about our cases of erysipelas and the treatment.

"AJAX."

DR. JOSEPH DWYER, the originator of Intubation of the Larynx, has been appointed Professor of Diseases of Children in the New York Post Graduate Medical School and Hospital.

Selected Articles.

THE TREATMENT OF PILES BY INJECTION.

So-called quacks, both in this country and in others, have been in the habit of using various injections for the cure of piles, advertising their method as being one which cured without the use of the knife, an instrument the public is unduly afraid of. I was led to test this treatment from the accounts given me by several American surgeons, who have from time to time attended the practice at St. Mark's Hospital for fistula. They confirmed what I had already heard, that Kelsey, of New York, a well-known rectal specialist, treats a large number of hæmorrhoidal cases by the injection of carbolic acid, and this with brilliant results. There can be no doubt that if by this method the pain and confinement attendant upon an operation, whether by ligature, clamp and cautery, crushing, or excision, can be obviated, an immense boon is conferred upon the patient.

Now, amongst the out-patients at St. Mark's, and including two or three private patients, I have tried this method in thirty-eight cases, and I may say at once that I have been agreeably surprised by the results. It is now over two years since I commenced, and up to the present time I have only met with one relapse, whereas three cases have remained well for nearly two years, and fourteen others for periods varying between this and six months. In nine cases there are no symptoms remaining, such as hæmorrhage, pain, or prolapsus; but sufficient time has not elapsed for me to discharge them as cured. I have lost sight of two, and ten are still under treatment, but all of these are improving. Excluding, then, the two cases which did not attend again after the first injection, all have been either cured (for a time, at all events) or are in a fair way to attain this end, with the exception of the case I have mentioned as having relapsed; but, indeed, this patient never gave the treatment a fair trial. He was a clerk in the city, and had been troubled with prolapse and bleeding at stool for seven years. After the administration of an enema, four large and well-developed piles were to be seen; and so large were they that I urged him to have them tied, but for this the patient had no time. In fact, it was a question of the loss of his berth if he were obliged to lie up. Accordingly I injected about two minims and a half of a carbolic solution, 1 in 10, into each pile, and returned them. There was a little bleeding, but no pain. This was on May 5th, 1887. On July 1st he wrote: "I have felt no pain whatever, and until to night I have seen no blood, and now it is very slight." I did not see him again, but on November 11th, six months after the injection, he

wrote to say he was quite well. It is but fair to say that he was taking a mixture of iron and magnesia, and using an ointment of the persulphate of iron. A few days ago he wrote to say that his piles troubled him somewhat and came down at stool. The only wonder to me is that he should have had so long a respite

In one case only was any, or perhaps I should say much pain complained of. The subject was a young man who, on my passing the needle into the first pile, jumped off the couch as if he had been shot. It was lucky that he did not break off the needle off the syringe. As he had not sufficient control over himself, I did not tempt Providence a second time, but admitted him into the hospital, where he underwent the usual operation of ligature. Our house-surgeon told me that he was very nervous and sensitive, complaining of more pain than his fellow-patients.

The ages of my patients ranged between 21 and 68, and they were all men, from the fact, I presume, that during the time I have been trying this method I have been in charge of the male out-patients at St. Mark's. In only one case had I to repeat the injections four times. One or two injections, as a rule, sufficed.

As to the Method Employed.—Various fluids have been used, as carbolic acid, perchloride of iron, sulphate of iron, and ergot. I have confined myself to the first named, using this formula: carbolic acid, gr. xij; glycerine and water of each ʒj, or 1 in 10, though in severe cases I have increased the strength to 1 in 5. If the piles are not down, that is, visible on separating the buttocks, an enema should be given; then, when the patient has strained his piles down as much as possible, he is placed on a couch on his elbows and knees. A hypodermic syringe, with a needle of good lumen, having been filled with the solution, an injection is made into the centre of each pile in turn of from two to five minims, and this should be done slowly, in order to give time for the fluid to diffuse itself. The piles having been oiled, should then be at once returned, and the patient may be allowed to depart. I advise him not to have an action of the bowels for twenty-four hours, and caution him to return the piles at once should they perchance become prolapsed. A mixture of sulphate of iron, dilute sulphuric acid, sulphate of magnesia, and infusion of quassia, three times a day, is prescribed, with an ointment of the subsulphate of iron to be passed up the bowel before and after stool. As a rule, I do not see the patient again for a week, when the report is usually satisfactory, that is bleeding and prolapse have lessened or disappeared. A fortnight or more should be allowed to elapse between each injection; at least, I have not found the necessity of repeating it at a shorter interval.

Of course, it is only of internal hæmorrhoids we are speaking. It seems to me that every variety of these may be treated by this method, though not so advantageously should the pile be much indurated, or have become semicuticular. It is obvious that sloughing and prolapsed hæmorrhoids, which are irreducible, are beyond the reach of this remedy.

There are certain cautions which it is as well to bear in mind. In the first place, make a thorough examination of the rectum to see that no other disease co-exists; as for instance, polypus, fissure, fistula, and stricture, either carcinomatous or fibrous; the latter I have known more than once to have escaped recognition, whilst the piles alone were treated. Before operating, see that the bowel is empty, and that the piles are well protruded. If the patient is unable to force them out with the help of an enema, I hardly think it worth while attempting this method, for careful constitutional and local treatment is usually sufficient, though it is recommended that the hæmorrhoids be injected through a speculum. Take care that the needle be inserted into the centre of each pile, or it is said that sloughing of the mucous membrane may be caused. After the injection swelling of the pile rapidly occurs, and if it is left long outside the sphincter there may be a good deal of difficulty in returning it. A digital examination after a week or so will discover slightly indurated swellings, corresponding to the tumours which have been injected. No doubt inflammatory thickening, with some thrombosis, is produced, which in time undergoes shrinkage, until at last an examination fails to discover anything abnormal.

There is a point one cannot lay too much stress upon, and that is to impress upon the patient the necessity of returning the part at once whenever it comes down. From the neglect of this one of my patients suffered great and unnecessary pain for three days, during which time the piles, which had become extruded, remained outside the sphincter.

The advantages of this method must be apparent to all, for the patient is not laid up, suffers practically no pain, and runs no risk to life from hæmorrhage, tetanus, erysipelas, or pyæmia, though I may here mention that my friend Mr. Cripps tells me that in some twenty cases one of his injections was followed by abcess. The patient commences to get better at once after the first injection, and is able to attend to his usual occupation during the whole course of treatment. Contrast this with any of the recognized operations. Although many of them are excellent, they necessitate the administration of an anæsthetic—at least, it is the usual thing, though it is possible to operate painlessly under cocaine, witness a case I reported some two or three years ago. Then a week in bed, and a subsequent week or two on the sofa, is generally required: in fact, it is usually three weeks or a month before the patient is fit for

work again, although I am aware that some men have gone to work with the ligatures still *in situ*.

As to the strength of the solution, it will be seen that I have employed comparatively weak ones, for Kelsey recommends 15 to 20 per cent. solutions, and even the pure acid; but then he only injects one hæmorrhoid at a sitting, which takes place weekly. Ball, in his recent work on the rectum, says that Dr. Matthews, of Louisville, declares this method to be painful, insufficient, and liable to cause death by peritonitis, embolism, and pyæmia. All I can answer is that, in these thirty-eight cases, extending over the past two years, I have been fortunate enough to meet with none of these things. I admit that the number of cases I have brought forward is but limited, probably not sufficient to allow one to form a definite opinion; however, I trust that I may be as free from accident in subsequent cases as in those I have already had. My colleague, Mr. Allingham, in the fourth edition of his work, throws cold water on the method, for he says he has "tried the plan in a few cases, but the result was much pain, more inflammation than was desirable, a lengthy treatment, and the result doubtful—certainly not a radical cure."

Only once have I met with anything deserving the name of pain; as a rule the prick of the needle only is felt. Excess of inflammation I have not seen. As to radical cure, it seems to me that many years must yet elapse before we can judge of that. As I have pointed out, three of my cases operated on two years ago are, I have reason to believe, still well.

I would that I could close this paper here; but it is only right that it should be known that the chief advocate of this method, Kelsey himself, is no longer so enamoured of it as he once was, when he had had a series of 200 successful cases. It appears that he has published a pamphlet, which I am sorry I have not been able to see, in which, having had some unsuccessful cases, he now recommends the operation (if such it can be called) in certain selected cases only.—F. Swinford Edwards, F.R.C.S., in *Br. Med. Jour.*

MEDICAL NOTES.

Sometimes an *infant's tongue* can be exposed to view by simply pressing the cheeks gently with thumb and finger. If necessary, hold the nose for a moment and the tongue will come in sight.

Dr. J. C. Da Costa prefers *silk ligatures* to any other form in operations upon lacerated cervix, as strong and never causing serious effects. In one case the suture accidentally remained six weeks without any evil results.

When *iodine or iodides* are to be administered for a long time, certain precautions must be observed to prevent iodism, as occasional intermission of the drug, the use of eliminants, as large draughts of water, or combined with such drugs as atropine. (Bartholow.)

During pregnancy *hypertrophy and dilatation of heart* are common, but transitory; the flow from kidneys become more profuse especially the watery portions, and sometimes in latter part of pregnancy a little albumin appears in urine; a little sugar need not cause alarm if there be no renal disturbance.

Prof. Da Costa prescribed for a case of *chronic gastritis* due to excessive use of alcohol, accompanied by morning vomiting, pain in epigastrium and flatulency:—

R. Zinci oxidi,	. . . . .	gr. ij.
Ext. belladonnæ,	. . . . .	gr. $\frac{1}{8}$.
Ft. pil. j.	. . . . .	M.

Sig.—One three times a day.

In the first stage of *hip disease* pain and swelling are absent and the patient does not complain; the second stage is the result of an injury, which may be slight and even unnoticeable, but an injury has been received in some form or other; the third and last stage is the destruction of the parts. Do not attempt to move the hip-joint if it is stiff; if you do, you will do harm.

The prognosis of *fatty heart* is unfavorable for a cure, but if there is no strain upon the organ, it can be benefited by treatment. Diet does not materially injure, but should be good and nourishing. Stimulus is the best treatment, given with meals in small quantities. Digitalis does not do very much good, but strychnine is valuable; also small doses of nitro-glycerin.

Prof. Barthlow recommends the iodides as among the best remedies for beginning *cirrhosis*, often adding arsenic to the prescription, whereby the efficiency of the iodide is increased:—

R. Ammon. iodidi,	. . . . .	℥j.
Liq. potas. arsenitis,	. . . .	f ℥ss.
Tinct. colombæ,	. . . . .	f ℥ss.
Aquæ,	. . . . .	f ℥iss. M.

Sig.—One teaspoonful three times a day, before meals.

The *ligatures used* in Jefferson Hospital are prepared by taking ordinary catgut, immersed in alcohol containing one per cent. corrosive sublimate and five per cent. tartaric acid for one hour. From this solution, immediately place in oil of juniper berries, where it must remain at least ten days before ready for use. When wanted for use, wipe the gut with a towel wrung out of a solution of bichloride of mercury, 1-1000, and place it in a similar solution, to which has been added twenty per cent. of alcohol; the alcohol prevents untwisting and swelling.

To relieve the paroxysm of *asthma*, there is no remedy equal to the hypodermic injection of morphine. In many cases iodide of potassium in full doses, fifteen to twenty grains every two or three hours, will arrest the paroxysm. In cases which persist for some days, the combined action of bromide and iodide of potassium, with the addition of one or two drop doses of Fowler's solution, is commended. The inhalation of pyridine, oxide of ethyl and fumes of burning narcotics are used to the exclusion of all other remedies by some asthmatics. In the treatment of asthma, no point is of so great importance as the careful regulation of the diet, which should be light and easily digestible, and of little bulk as possible, avoiding starchy and saccharine substances. (Bartholow.) *Cin. and Chm. Rec.*

INFECTION OF FŒTUS THROUGH PLACENTA.—The precise manner in which the fœtus is infected by a disease which has attacked the mother has often been disputed. Small-pox, tuberculosis, and syphilis may infect the fœtus. If these diseases depend on micro-organisms, these germs must pass through the placenta; if so, the placenta is not a filter which arrests all solid or noxious bodies, as an old theory supposes. If it be a filter, how is it that, as experience has proved, it does not always let the same micro-organism pass? This is the case with charbon in rabbits. And how is it that the placenta always gives transit, on the other hand, to certain specific micro-organisms, as in the case of chicken cholera? These questions have been propounded in the *Archives de Physiologie* for August. They appear to be solved by certain experiments conducted by M. Malvoz, of Liegè, recapitulated in that periodical. M. Malvoz contends that micro-organisms only clear the placental barrier and enter the fœtus when the placenta itself presents pathological changes in its chorionic villi, changes generally due to the micro-organisms themselves. Thus Malvoz injected into the blood of pregnant rabbits emulsions of Indian ink, an inert substance, and into others solutions containing non-pathogenic bacilli. In no case were any granules of the ink, or any bacilli found in the fœtus, and in all but two of the infected subjects were detected in the placenta than in the liver of the mother. After similar infections with bacillus anthracis, the tissues of fœtuses were subjected to cultivation, but, in that tubes of cultivating duidcarly fcm showed the charbon bacillus. Lastly, M. Malvoz inoculated pregnant rabbits with chicken cholera. In every case the specific bacillus was found in the fœtal tissues. On examining the placentæ in the latter cases, they were invariably found to be diseased; in the charbon experiments the placentæ were but rarely diseased. In the Indian ink and non-pathogenic bacilli cases the placenta was never diseased. The placenta was diseased in all the few cases where the charbon bacillus infected the fœtus. The germs were found abundantly in hæmorrhagic areas disseminated over the placenta. Clinically, placental lesions are found in syphilis and small-pox, diseases often communicated to the fœtus. Thus it would appear that the placenta allows the transit to the fœtus of those micro-organisms only which have the property of first setting up morbid changes in its own substance.—*Br. Med. Jour.*

ANTIPYRINE IN LABOR.—During the first stage of labor the accoucheur is in a position to do but little toward relieving the maternal suffering, and this little consists in the administration of opium or of chloral. The former drug I have always been loath to administer to the parturient, for the reason that if pushed it may retard the labor, and further because it is of the highest importance the puerpera that the intestines should functionate normally in order that this main emunctory should not become locked, and poisoning from fæcal accumulation ensue. In chloral we possess a most valuable means of "taking the edge off the pains" and of regulating their rhythm, but the woman's suffering during the acme of the pains is still intense, and we often wish we had an adjuvant to the chloral which, whilst nullifying none of its effects, would render the contraction practically painless. In the hands of certain observers, electricity—the faradaic form chiefly—has rendered service in this direction, but, valuable as this agent has proved in my hands as an oxytocic, it has never appeared to me to possess any anæsthetic effect on the uterus. When cocaine was discovered, before long it was heralded as of value as a local anæsthetic during childbirth. In my hands, however and other observers are in accord with me, it has proved of no value whatsoever during the first stage of labor, and questionably of at all during the second stage. The excellent results yielded me by antipyrine in dysmenorrhœa and other affections where it is a question of nerve pain have led me during the past year to test it during the first stage of labor, and my results have been sufficiently gratifying to justify me in asking other obstetricians to try the drug. Possibly it has been similary used by others, but if such be the case I have seen no record of their experience. My habit in regard to the administration of the drug is to give fifteen grains per rectum, and preferably with some stimulant, such as the aromatic spirits of ammonia, and to repeat the dose in one hour thereafter. In two hours after the second dose the patient receives ten grains, and so on every two hours if needed. The quantity which I administer, as has always been my custom, in fifteen grain doses every three-quarters of an hour till three or four doses have

been received. The result of this combination has been to nullify the pains so much as to be in two instances scarcely percepitible, and in others simply uncomfortable. The progress of labor has not been at all interfered with, and neither the mother nor the child has presented evidence of injury from the administration of the antipyrine.

I report this experience thus briefly in order that other observers may test the validity of my results. Should there be concurrence of opinion, the first stage of labor will be rendered practically painless by antipyrine, even as the second and third may at any time be made through resort to chloroform.—Dr. Grandin, in *N. Y. Med. Jour.*

THE GINGIVAL LINE IN THE DIAGNOSIS OF TUBERCULOUS PHTHISIS.—In the year 1850 A. Fredericq called attention for the first time to a red line which occurs on the gingival border in various diseases. This line is intensely red in cases of acute phthisis and more bluish in chronic cases of this disease. This line was observed by him in the earlier stages of phthisis, and was considered not only of semeiotic but of prognostic value; the more rapid the course of the disease the more intensely red the line, and any diminution in the intensity of this redness was considered as a favorable sign. A bronchitis without this line was considered by him never to be of tuberculous origin. In 1854 Thompson again called attention to this line in phthisical individuals, and found that it was especially characteristic around the incisors of both jaws. He furthermore found that it occured in all stages of this disease, and was occasionally one of the earliest signs, occurring, however, less frequently in women. When the patient's condition was improved, Thompson observed that the line disappeared; the broader the line the more unfavorable the prognosis, which was also bad when light red spots occurred on the mucous membrane of the cheek. Saunders and Draper followed up the observations of Thompson and concluded that the red line frequently attended tuberculosis, but could not be considered as characteristic of the same. More recently Dr. George Sticker, studied the subject, and finds that the red line of Fredericq and Thompson is almost invariably present in phthisis, and may be considered one of the earliest symptoms of this disease. He furthermore found that the line was present in healthy women in the latter stages of pregnancy, and existed for a time after its termination. In other healthy individuals and in non-phthisical patients this red line is only exceptionally found, and if so, in the senile period of life. In young persons who are not phthisical it is never present.—*Münch. Med. Woch.*

PRACTICAL HINTS REGARDING CHILDREN.—Dr. A. Jacobi, in the *Arch. of Ped.* gives some practical points. Probably most of these have been formulated in the minds of the majority of physicians, but some things are such as bear constant repetition.

Always teach a nurse that a child can not swallow as long as the spoon is between the teeth; that it is advisable to depress the tongue a brief moment, and withdraw the spoon at once, and that now and then a momentary compression of the nose is a good adjuvant.

The taste of quinine is disguised by coffee, chocolate and "elixir simplex."

Powders must be thoroughly moistened; unless they be so, the powder adhering the fauces is apt to produce vomiting.

Inunctions require a clean surface, and are best made where the epidermis is thin, and the net of lymph-ducts very extensive, as on the inner aspect of the forearm and the thigh.

Babies, after having taking opiates for some time, demand larger, and sometimes quite large doses to yield a sufficient effect.

Febrifuges and cardiac tonics, such as quinine, antipyrine, digitalis, strophanthus, sparteine, convallaria, etc., are tolerated and demanded by infants and children in larger doses than the ages of the patients would appear to justify.

Mercurials affect the gums very much less in young than in advanced age.

The rectum of the young is straight, the sacrum but little concave, the sphincter ani feeble, and self-control is developed but gradually; for these reasons rectal injection is allowed to flow out or is vehemently expelled. Therefore one which is expected to be retained must not irritate. The blandest and mildest is a solution of six or seven parts of chloride of sodium in a thousand parts of water, which serves as a good vehicle for medicine ueless incompatible with the latter. The injection must be made while the child is lying on its side (preferable the left side), not on the belly over the lap of the nurse, for in this position the space inside the narrow infantile pelvis is reduced almost to nothing.

In many cases of intense intestinal catarrh, large and hot (104° to 108° F.) enemata will relieve the irritability of the bowels and contribute to recovery. They must be repeated several times daily. When there are many stools and these complicated with tenesmus, an injection, tepid or hot, must or may be made after every defæcation, and will speadily relieve the tenesums.—*Arch. of Gynæcol.*

RULES FOR A HEALTHY MILK SUPPLY.—1. The milk of diseased cows should not be sent to market. Any condition that produces a fever in a milch cow should be regarded as rendering the milk bad. 2. The milk of cows fed upon distillery swill, or those fed entirely or largely upon fermenting brewers

grains, should not be sold for infants food. 3. Cows should not be allowed to drink stagnant pond or ditch water. 4. Milk from cows that are overheated or worried, at the time of milking, should not be sent to market. 5. If the udders are dirty, they should be washed clean before milking. 6. The milk should be cooled outside of the stable, and the cans should be covered during the process, to exclude air and dust. Milk should be kept at a temperature below 60° F., but ice should never be put into it. 7. Warm milk should never be received from the dealer, nor should the can be left out on the sidewalk in summer. 8. Milk should always be kept covered, and should never be kept in an ice-box with meats or vegetables possessing an odor. 9. Ice-boxes, stores, and wagons in which milk is kept, should be kept clean and sweet by occasional washing with chloride of lime followed by clean water, or soap and water. 10. When possible, only full cans should be received. A small full can is better than a large one partly filled, as the agitation and churning of the milk is less in a full can. Avoid the unnecessary handling of milk. The necessary agitation of shipping and delivering is an injury to it. 11. Milk that has been brought back from the morning rounds should not be mixed with other milk; it should be cooled at once. and sold as soon as possible. 12. If milk is kept over night, a small portion of it should be boiled to see if it would curdle, before it is sold. 13. Each and every dairy's milk should be tested daily. 14. It is best to make a contract with the one who delivers the milk to you to furnish that of a given test by the lactometer, say 105 to 110, and giving at least ten per cent. of cream. 15. Milk which contains dirt settling to the bottom of the can, blood, offensive odors or taste, should not be sold to customers. 16. *Cleanliness* in the handling of milk *is absolutely essential to its wholesomeness.*—Dr. Bartley in *Brooklyn Med. Jour.*

Connection of Disease with Intemperance.—The Committee on Collective Investigation of the British American Association summarize the results of their researches on this subject as follows:

On the whole, then, in addition to the information that we obtain from these returns as to the alcoholic habits of the inhabitants of this country, and as to the relative alcoholic habits of different occupations and classes, we may not unfairly claim to have placed upon a basis of fact the following conclusions:

1. The habitual indulgence in alcoholic liquors beyond the most moderate amounts has a direct tendency to shorten life, the average shortening being roughly proportionated to the degree of indulgence. 2. That a man who has passed the age of twenty-five, the strictly temperate, on the average, live at least ten years longer than those who become decidedly intemperate. 3. That the production of cirrhosis and gout from alcoholic excess plays the very marked part which it has long been recognized as doing, and that there is no other disease anything like so traceable to the effects of alcoholic liquors. 4. That in cirrhosis and gout apart, the effect of alcoholic liquors is rather to predispose the body toward the attacks of disease generally than to induce any special pathological lesion. 5. That in the etiology of chronic renal disease, alcoholic excess, or the gout which it induces, probably plays a special part. 6. That there is no ground for the belief that alcoholic excess leads in any special manner to the development of malignant disease, and some reason to think that it may delay its production. 7. That in the young, alcoholic liquors seem rather to check than to induce the formation of tubercle; while in the old there is some reason to think that the effects are reversed. 8. That the tendency to apoplexy is not in any special manner induced by alcohol. 9. That the tendency to bronchitis, unless perhaps in the young, is not affected in any special manner of alcoholic excess. 10. That the mortality from pneumonia, and probably that from typhoid fever also, is not especially affected by alcoholic habits. 11. That prostatic enlargement and the tendency to cystitis are not especially induced by alcoholic excess. 12. That total abstinence and habitual temperance augment considerably the chance of a death from old age or natural decay without special pathological lesion.—*Brit. Med. Jour.*

Unknown Sensations.—Sound is the sensation produced on us when the vibrations of the air strike on the drum of our ear. When they are few, the sound is deep; as they increase in number, it becomes shriller and shriller; but when they reach forty thousand in a second they cease to be audible. Light is the effect produced on us when waves of light strike on the eye. When four hundred millions of millions of vibrations of ether strike the retina in a second, they produce red, and as the number increases the color passes into orange, then yellow, green, blue, and violet. But between forty thousand vibrations in a second and four hundred millions of millions we have no organ of sense capable of receiving the impressions. Yet between these limits any number of sensation may exist. We have five senses, and sometimes fancy that no others are possible. But it is obvious that we cannot measure the infinite by our own narrow limitations.

Moreover, looking at the question from the other side, we find in animals complex organs of sense, richly supplied with nerves, but the function of which we are as yet powerless to explain. There may be fifty other senses as different from

ours as sound is from sight; and even within the boundaries of our own senses there may be endless sounds which we cannot hear, and colors as different as red from green, of which we have no conception. These and a thousand other questions remain for solution. The familiar world which surrounds us may be a totally different place to other animals. To them it may be full of music which we cannot hear, of color which we cannot see, of sensation which we cannot conceive.—Sir John Lubbock, in *Pop. Science Monthly.*

CHRISTIAN SCIENCE HEALING.—Christian science healing, is a glorified form of faith healing, and has an immense following in America. During last season the drawing-room of Lady Mount Temple, at Shelley House, was for several weeks filled by a fashionable crowd of people to listen to a course of lectures by Miss Lord, the editor of *The Woman's World.* This particular sort of teaching had evidently an attraction for theosophists, spiritualists, mesmerists, *et hoc genus omne.* Miss Lord has since published as the outcome of the course of lectures a volume of some 500 pages. The essence of the teaching lies in denying the reality of any form of evil—evil is illusion, good only is real and permanent. As pain and disease are forms of evil according to this theory, they do not really exist, except in the imagination, which no doubt might with truth be said of many of the ailments of a fashionable audience. To be rid, therefore, of disease (not surgical disease, be it remembered, for even toothache, if proceeding from caries, resists the treatment), it is not necessary to have faith but reason. Suppose the case is one of facial neuralgia, you may cure your patient either by making a negation or an affirmation Nothing can be simpler. You say either "Your head does not ache, you really have no pain at all, you only think you have, it is all an illusion," or you may proceed by the other method, and say: "You are perfectly well, you were never really better in your life, for good is real and pain is illusion," and that is all; no nasty drugs, no hypodermics, no constant or intermittent currents, no passes, no anything but "words, idle words,"—no, not *idle* words, you must be in deadly earnest, and under a proper course of this treatment your patient gets well. It beats homœopathy, as you have not even to order globules. Its simplicity is its great drawback with the vulgar, but the highly intellectual theosophical folk who hold that "words are creative acts" find it highly consonant with their ideas, and say it does them and their friends as much or more good than regular practice. Miss Lord cautions her pupils that they must not take fees for their treatment, as people have been prosecuted in America for obtaining money under false pretences when they have taken money for their negative and affirmative. But of course this is an additional merit of the system to the patients. Surgery is not attempted; it has not been found uniformly successful in cases of dislocation or fracture. It is on record that a Christian science healer did once reduce a dislocated arm by vigorously working it aimlessly about while declaring that "the arm was perfectly well," but that is not to be taken as a precedent. An old monastic chronicle tells how a good brother who had lost an eye prayed for a new one at the shrine of St. Thomas of Canterbury; in the course of time he received a new eye, but the chronicler quaintly adds that "it was a verrey litel one." Christian science healing has not even got to that yet.—*Br. Med. Jour.*

LANOLIN AND BORIC ACID IN SKIN DISEASES IN CHILDREN.—The combination of lanolin and boric acid as an ointment is said to have a most gratifying effect in certain skin diseases in children, especially eczema of the head and face, intertrigo, and seborrhœa. In the case of eczema, for example, with raw patches on the cheeks and yellowish crusts on the head, the surface is first cleansed in the usual way, and then dusted over with finely powdered boric acid. On the following day this washing and dusting over is repeated; already the inflammation will seem lessened. The process is then repeated twice daily, the washing being always done gently, until the skin is in a condition to bear an ointment containing 30 per cent. of lanolin and 8 per cent. of boric acid In the squamous form of eczema with considerable induration, olive oil is well rubbed in and then removed with castile soap, and an ointment containing ½ or 1 per cent. of salicylic acid with 30 per cent. of lanolin is energetically applied according to the degree of induration. This washing and application are repeated twice daily. The strikingly beneficial action of this course of treatment, which is less painful than the use of strong alkalies or oil of cade, is ascribed to the penetrating properties of lanolin, which thus facilitates the entrance of salicylic acid in the deeper layer of the epidermis. Dr. Russell Sturgis, who advocates the above treatment, also finds lanolin a reliable means of alleviating the irritation due to chronic urticaria. —*Br. Med. Jour.*

PELVIC ABCESS.—Dr. T. Gaillard Thomas, of New York, has found three forms of pelvic abcess: 1. Inflammation of the broad ligament. 2, Of the cellular tissue between the vagina and the posterior part of the uterus. 3. The cellular tissue between the bladder and the uterus. Another form is that which is treated as pyo-salpinx. He thinks that the hazardous operation of laparotomy could often be avoided by opening and draining through the vagina. He thinks that many hard tumors if explored, will show the presence of pus. The man

who waits for constitutional symptoms in pelvic abscess will wait a long time. There are but two passages by which pus ought to be let out—through the vagina and the abdominal wall. If the abscess points and clamors for an outlet through the rectum, I do not think it should be allowed to do so. I have seen two cases in which the patient died from evacuation through the rectum. Gases and fæces passed through the opening. The evacuation should certainly not be made in the bladder. I use Goodell's modification of the German dilators, and always insert the drainage tube. If the abscess is anterior to the uterus, I separate the anterior vaginal wall precisely as I do in uterine extirpation. Pelvic abscess is almost always immovable; neoplasms, movable. This is the great diagnostic difference. Yet some pelvic abscesses are very movable, especially those posteriorly situated. Hence, many are diagnosed fibroid tumors, and cured by electricity. I use bichloride, 1 : 1.000. If the symptoms do not disappear, I use a stronger one, but with fear and trembling.

Dr. W. Gill Wylie, of New York, thinks cellulitis has always played too great a role in the etiology of pelvic abscess. Many abscesses, four out of five, occurring within a year or two after delivery, are due to salpingitis or ovaritis, and our best proof is from those who have opened the abdomen. Great mistakes are made by not distinguishing between those due to septic poison and ovaritis or salpingitis. It is of no use to open the vagina and leave a rotten ovary there. My views are, if you have pelvic abscess, patient dangerous, temperature 101° F., and sweating, I would open the vagina or belly at once, and find out just what can be done by the vagina. I have done it often, and if closed soon the danger is small. One patient died in New York, one in Chicago, from using an aspirator in pelvic abscess.—*Med. Record.*

ACETIC ACID AS A DISINFECTANT.—Dr. F. Engelmann, being much impressed by the numerous fatal cases which are constantly occurring from the employment of intra-uterine injections in obstetrical practice, and feeling that there is doubt whether they ought not to be given up, brings before the profession an antiseptic which he has used for the last two years in a large number of cases, and which has given him excellent results—acetic acid. Some years ago he was led to use and to recommend the employment of acetic acid in diphtheria, and he is convinced that it possesses antiseptic properties in as high a degree as carbolic acid itself, and has at the same time the great advantage of being non-injurious, even when used in a tolerably concentrated form; besides, it has a decidedly styptic effect, and this is an additional advantage in obstetric. practice. Again, acetic acid is very diffusible, thus penetrating the tissues to a much greater extent than most other antiseptics. Corrosive sublimate, as is well known, forms insoluble albuminoid compounds on the surface, and thus does not act upon the deeper parts of the tissues. In one respect acetic acid is similar to corrosive sublimate—viz., in its action on instruments; but the latter is the more prejudicial of the two. The forceps may remain for a quarter of an hour in a 3 per cent. solution of acetic acid without being injured. The irrigator is, however, liable to be affected by the prolonged use of acetic acid solutions. It should be remarked that the hands must be washed twice after using acetic acid, as of course soap will not dissolve where this is present. The skin is rendered peculiarly soft and pleasant to the feel. As to the strength to be used, Dr. Englemann, as a rule, employs a 3 per cent. solution, but he has sometimes employed a solution as strong as 5 per cent.; this, however, is apt to cause a smarting sensation in any spot where the surface is broken. All the cases in which acetic acid was used recovered without abnormal rise of temperature.—*Lancet.*

REVIVAL OF TARTAR EMETIC IN TREATMENT OF PNEUMONIA.—The amount of attention that has been given this ancient use of an old drug shows that it has not been so quite forgotten everywhere as it seems to have been here in America.

In Germany the drug has been given after the method of Lebert. Of tartar emetic gr. jss—v are ordered in ℥vj of water, of which solution ℥ss (= gr. ⅛+) is given every hour till vomiting or diarrhœa occurs, and then every two hours. In most cases these symptoms from the side of the gastro-intestinal tract will cease even under the continued use (Lebert, Brückner); if not, or if opium does not control them, the remedy is to be given up. The tolerance is very variable. Usually, after one or two doses, there is vomiting, which brings great relief, then four to eight watery stools, then sweating and an increased expectoration. The pain and dyspnœa are much relieved. The well-ascertained physiological action of tartar emetic is in diminishing the blood-pressure, and its therapeutical action in pneumonia is probably to be found in this effect on the pulmonary circulation (Lebert). The clinical results from its use in the hands of these observers have been encouring. Certainly most physicians would rejoice to have forty successive cases in hospital practice without a death! (Mosler).

Dr. Arthur Jamison, basing his conclusions on the careful study of 213 personally observed cases in 155 of them has acquainted himself with the later history of the case and secured the opportunity of a physical examination at a period not less than two years after the attack. This after history, he considers, should be the guide to treatment, for in 74 of the 155 examined he found traces of an unresolved pneumonia, viz., dulne

of affected side, *rales*, etc., and 12 of the cases died of phthisis. Of the 81 found free from signs 65 *had been treated by tartar emetic*. Not only did physical signs persist in many cases, but he ascertained that many patients, though discharged as well after treatment by the usual methods, had for months some cough and expectoration, constant feeling of uneasiness, flatulent distention after meals, and in general were not up to par. On the basis, therefore, of much comparative trial of all methods of treatment, coupled with this after-investigation, Jamison recommends tartar emetic as a continued remedy, ascribing to it the merits of relieving the distress of the first stage, and of easing the strain of breathing, while it is superior to everything else in inducing the greatest degree and rapidity of resolution, as tested by the after-condition of the lung. He gives it in doses of one-twentieth of a grain for young adults every hour, but less frequently to older persons. When the symptoms are relieved it is given less often, but still continued several days, or even a week after defervescence. In no case of the large number treated has it caused either vomiting or diarrhœa. It is combined with a little paregoric. Diluted nitric acid is preferred in the after-treatment.—*Br. Med. Jour.*

OBSERVATIONS ON THE USE OF TEREBENE.—Thirteen cases, treated by the author, were of chronic bronchitis, most with more or less extensive pleuritic adhesions. Three were acute bronchitis, ten emphysema, two asthma and bronchitis, ten phthisis, one pleurisy, and one of the third stage of pleuro-pneumonia. Two of these, both cases of acute bronchitis, were cured, one in four and the other in eleven days. Thirty-three cases were improved, most of them markedly, but a few only to a slight degree. Five were unimproved, two of the patients being obliged to discontinue the drug after two or three days, as it produced vomiting. The shortest time the treatment was continued in any case was four days, the longest time six months. The average length of treatment was a little over twenty-six days. Most of the patients took fifteen minims, and some as much as half a drachm, in a mucilaginous mixture four times daily. In all except three the cough was improved, becoming softer and less frequent. In twenty-six the quantity of the expectoration was lessened, in four it was unchanged, and in two it was increased. The latter were under treatment only one week, and it was found in some of the other cases that the expectoration was increased for the first few days and afterward diminished. In seventeen cases the expectoration became thinner and more watery; in six it was no thinner. In the other cases no note was kept in regard to this point. In those troubled with dyspnœa it was diminished in thirteen and undiminished in eight. The patients noticed an increase in the urine in nine cases; no increase was noticed in fifteen. In many of the cases the appetite improved. In two cases the terebene caused vomiting, in two nausea, in one dizziness and nausea, and in two dizziness. These symptoms usually disappeared when the dose was reduced. It is beneficial in affections of the bronchial mucous membrane, both acute and chronic. It relieves the dyspnœa of emphysema, it is readily borne by the stomach, and it seems to have a resolvent action on pleuritic adhesions.—*N. Y. Med. Jour.*

THE SURGICAL TREATMENT OF AORTIC ANEURISM.—At a recent meeting of the Academy of Medicine, Dr. Constantine Paul read a paper on the Treatment of Aneurisms of the Aorta. He does not defend the method that bears the name of Moore, but he believes it to be useful in certain cases to introduce a foreign body into the aneurismal sac. He shows the defects of the electropuncture, which produces around the needle a deposit of coagulated albumen without adhesion to the parieties of the sac; it is movable, friable, and forms a veritable grain of emboli. The procedure of Constantine Paul consists in the introduction of a certain number of Japanese needles, which are long and extremly fine, so fine that, to make them penetrate the skin, it is necessary to employ a conductor, which keeps them straight. The needles are left in the sac only a few minutes; they produce a slight degree of adhesive inflammation of the aneurismal sac. After a few days the same operation is recommenced, and a new access of inflammation takes place. In a short time the parietes of the sac become thickened, and the needles cannot be introduced into the points where it appeared that the aneurismal sac was about to open. In these special conditions, this form of surgical intervention, always inoffensive when it is practised as indicated by Constantine Paul, renders real service. Dr. Dujardin-Beaumetz thinks that until some absolutely certain method can be found all surgical procedures in the treatment of aneurisms of the aorta should be abandoned, and particularly that of Moore. More benefit may be expected from the administration of the iodide of potassium, especially when given in beer or black coffee, or even in milk, as it is then better tolerated, the elimination of the iodide rapidly takes place, and the inconveniences of iodism are prevented.—*Lancet.*

A NEW AND RATIONAL TREATMENT FOR GONORRHŒA.—Under this attractive title, Mr. Charles J. Smith, formerly Surgeon to the Farrington Dispensary, states in the *Lancet*, that he has been able to cure his cases of gonorrhœa in five days by using an instrument by which an ointment is made to cover the inside of the urethra. The in-

strument is modeled after Mr. Allingham's rectal ointment introducer, and consists of an oblong ointment container with a long broad screw to expel its contents. To the box are attached perforated stems of different sizes to fit closely the urethra, which he says must be stretched by as large a stem as can be introduced, so as to spread the ointment fairly and well over every portion. The bladder should be emptied immediately before the instrument is introduced, so that the urethra will be well washed out from behind. The stem is well oiled before introduction, and, when once introduced, the screw is turned, the ointment expressed, and the whole instrument rotated as it is withdrawn. He uses a mixture of oil of eucalyptus and olive oil. Three hours after using the instrument, a mild injection (he does not say of what) is used, and the ointment-applicator used again the next morning. The only medicine given is a saline aperient.

The principles applied in this treatment are sound, but Dr. Smith's statement as to their efficiency needs confirmation. Certainly cocaine should be used before the instrument is inserted, not only because the use of the latter would itself be painful, but because the oils are irritating.—*Med. and Sur. Rep.*

On the Action of some Antiseptics and of Heat on the Bacillus of Tuberculosis.—A. Nersia *Jour. de Med., Chir. et Pharm.*, reports from the *Annales de l'institut Pasteur*, the results of experiments made to kill the bacillus in the sputum of tuberculous patients. It was found that the bacillus was killed after thirty minutes in a 5-per-cent. solution of phenic acid, and lived only five minutes in a 1-per-cent. solution of the same acid. Its life lasts only five minutes in absolute alcohol and iodoform 1-per-cent. It is killed after ten minutes under the influence of ether, or when in a sublimate solution of 1-per-cent.; it can live three hours in a 3-per-cent. solution of thymol, and six hours in a 2·5-per-cent. solution of salicylic acid; it resists for twelve hours in a four per-cent. solution of boric acid and water saturated with creasote. It resists a temperature of 140° F. and succumbs when exposed to a temperature of 158° F. for ten minutes.

Cascara Sagrada.—Referring to the unsightly mixture produced when water is added the official liquid extract of cascara sagrada, Dr. Irving says that this may be entirely obviated by the addition of a very small quantity of ammonia solution, which clears it to a bright ruby color seen by transmitted light, the transparancy of which is not affected by the addition of a flavoring agent such as tincture of orange or by saccharin (*Brit. Med. Jour.*) It can then be dispensed clear with iron preparations, such as citrate of iron and ammonium, a combination which Dr. Irving says he has found serviceable, with or without small doses of digitalis, where the heart is enfeebled and constipation exists. Mr. Martin also reports (*Lancet,*) that he has succeeded in subduing the pain of rheumatism after sodium salicylate had failed, by administering cascara sagrada in combination with that salt, the proportions being 15 grains of the salicylate with 10 minims of the liquid extract in orange flower water every three or four hours.—*Phar. Jour. & Trans., Can. Phar. Jour.*

Causes of Malignancy in Syphilis.—M. Fournier gives six causes for malignancy in Syphilis:

1. Age. 2. Scrofulo-tuberculosis. 3. Alcoholism. 4. Malaria. 5. Hereditary predisposition. 6. Insufficiency of treatment.

Syphilis is especially grave at the two extremities of life. Acquired beyond fifty the prognosis is very grave, and beyond sixty the disease is characterized by tending to phagadæna, profuse and general symptoms, early appearances of gummata and cerebral symptoms; and lastly to a marked reaction upon the general health, prostration, cachexia, and loss of general strength and appetite. In the scrofulous, syphilis is very apt to take on the suppurative and rupial forms. It is among them precocious gummata and massive adenopathies are seen. Alcoholism acts in predisposing to grave and precocious forms of syphilides, constant eruptions, cachexia, and cerebral syphilis. Poverty is one of the causes of malignant syphilis, and it is among the poor that the worst forms of syphilis are the most common. Nervous overwork is one factor of gravity for syphilis in directing its localization upon the brain and cord.

Fournier says that nineteen out of twenty cases of severe tertiary syphilis is the direct result of insufficient treatment, or no treatment at all. *Boston Med. and Surg. Jour.*

Contra-Indications of Antipyrin.—Some time ago, M. Huchard said that antipyrin should be used sparingly in diseases such as typhoid fever, in which the kidneys served as emunctories, as it diminished the secretion of urine. On the same principle he gave eight grammes a day to a woman suffering from meningomyelitis, who passed from 24 to 28 litres of urine in 24 hours. This quantity was reduced to five litres under antipyrin. M. Huchard therefore suggested the use of antipyrin in analogous cases, such as diabetes, for instance. M. Dujardin-Beaumetz expressed a similar opinion. Antipyrin should no more be given than opium or salicylate of soda when the kidneys were diseased. These substances being eliminated by these organs, might possibly be absorbed into the organism with toxic effects. M. Dujardin-Beaumetz had tried antipyrin in two cases of polyuria, the amount of

urine being diminished in both cases. M. Huchard says that arterio-sclerosis should not be treated by antipyrin, even when the kidneys were affected.—*Brit. Med. Jour.*.

PERNICIOUS ANÆMIA—The conclusions of Dr. Hunter in his investigation into the pathology of pernicious anæmia are as follows:—

1. Pernicious anæmia is to be regarded as a special disease, both clinically and pathologically. It constitutes a distinct variety of *idiopathic* anæmia. 2. Its essential pathological feature is an excessive destruction of blood. 3. The most constant anatomical change to be found is the presence of a large excess of iron in the liver. 4. This condition of the liver serves at once to distinguish pernicious anæmia *post-mortem* from all varieties of *symptomatic* anæmia, as also from the anæmia resulting from loss of blood. 5. The blood destruction characteristic of this form of anæmia differs both in its nature and its seats from that found in malaria, in paroxysmal hæmoglobinuria, and other forms of hæmoglobinuria. 6. The view can no longer be held that the occurrence of hæmoglobinuria simply depends on the quantity of hæmoglobin set free. 7. On the contrary, the *seat* of the destruction and *the form assumed by the hæmoglobin* on being set free are important conditions regulating the presence or absence of hæmoglobinuria in any case in which an excessive disintegration of corpuscles has occurred. 8. In paroxysmal hæmoglobinuria the disintegration of corpuscles occurs in the general circulation, and is due to a rapid dissolution of the red corpuscles. 9. In pernicious anæmia the seat of disintegration is chiefly the portal circulation, more especially that portion of it contained within the spleen and the liver, and the destruction is effected by the action of certain poisonous agents, probably of a cadaveric nature, absorbed from the intestinal tract.—*The Polyclinic.*

THE following are examples of answers given by *graduates* in medicine at recent examinations held by the State Board of Examiners of Virginia:

"Describe the larynx. *Ans.* The larynx is composed of cartilage. The œsophagus passes through the larynx.

What is the function of the liver? *Ans.* Do not know.

Give tests for arsenic. *Ans.* Sulphuretted hydrogen is one. Don't know rest.

Give test for mercury. *Ans.* Do not remember.

Give dose of tartar emetic. *Ans.* Ten grains.

Give dose of sulphate of atropia. *Ans.* Hypodermically, 10 grains; by mouth, 60 grains.

Give dose of corrosive sublimate. *Ans.* One grain.

How would you treat placenta prævia? *Ans.* I don't know what it is.

Give dose of powdered cartharides. *Ans.* Forty grains.

What is the source of iodine. *Ans.* It is dug out of the earth in blocks, like iron.

Describe dengue, or break bone fever. *Ans.* By four applicants: A fever that comes on soon after the bones are broken. By one applicant: The patient should be cautioned against moving, for fear the bones should break.

Describe the peritoneum. *Ans.* It is a serous membrane lining the belly and extending into the chest, covering the heart and lungs."

DANGER FROM THE USE OF COCAINE.—The following conclusions are given in an American contemporary bearing on the use of cocaine and the risks of toxic symptoms:—1. Certain persons possess an idiosyncrasy to cocaine which cannot be foreseen or entirely guarded against. 2. Cocaine exerts its toxic effects upon the nervous centres and secondarily on the heart. 3. Its evil effects are most liable to be seen in neurotic subjects. 4. The danger in cocaine-poisoning is mainly from paralysis of the heart (syncope). 5. It may be well to precede its use by the administration of alcohol or other cardiac stimulant, as is done with chloroform. 6. Special care is needed in "weak heart" and organic heart disease. 7. The subcutaneous administration is dangerous and should be avoided. 8. The use of the stronger solution is dangerous and unnecessary. 9. The treatment of cocaine-poisoning consists of measures to rouse the heart, especially inhalations of nitrite of amyl.—*Med. Press.*

NERVE-STRETCHING.—A paper on nerve-stretching presented to the American Surgical Association by Dr. N. P. Dandridge, concludes as follows: 1°. That nerve-stretching should be condemned in all forms of central disease, such as tabes, myelitis, etc. 2°. That it offers little prospect of relief in tetanus. 3°. That it should be regarded as a reliable method in cases of persistent neuralgia and peripheral paralysis of sensation in the extremities. 4°. That stretching the facial is indicated in spasmodic convulsif. 5°. That further trial is justified in reflex epilepsy. 6°. That stretching the lingual should be tried in painful affections of the tongue. 7°. The resection should always be preferred to stretching in the spinal accessory and in the branches of the fifth nerve except the lingual.

IODOFORM NOT A GERMICIDE.—The concensus of opinion of recent observers (*Am. Jour. of Med. Sciences*) concerning iodoform is, that it is not a germicide, and is useless to disinfect wounds or to prevent general infection. It, however, possesses two excellent effects, and, because of these, it is still used. Local anæsthesia is produced by it and secretion from wounds diminished. The latter is

thought to be due to its destructive influence on the ptomaines generated by the cocci. Free iodine or an iodine compound is liberated in the wound which exerts this action. No ptomaines have been demonstrated in connection with the bacilli of suppuration and erysipelas, so its effect must be nil in certain surgical affections. Its greatest usefulness is in situations in which putrefaction, with the formation of stinking ptomaines, is unavoidable. —*Polyclinic.*

Skin Diseases Due to Defective Alimentation.—In common with other organs the corium requires a plentiful supply of oxygenated blood, but an additional amount is called for to supply the appendages of the skin, the proper nourishment of which is essential for the healthy condition of the skin as a whole. There is no doubt that defective alimentation is a potent factor in cutaneous pathology. In infancy it appears most frequently in eczema, and latter on in urticaria and erythema.

Eczema in infants often appears as the result of too early weaning when the child is fed with a little of every thing. That skin diseases are the frequent result of irritation of the gastro-intestinal tract is well known, and this is frequently the result of defective alimentation. The last words of England's best-known dermatologist, Sir Erasmus Wilson, in an address before the Medical Society, of London, were: "Well, our first six patients are adults, say between forty and sixty years of age; some have eczema, moist and dry, recent and chronic; some erythema, some gutta rosea, and some lichen. We inquire into the functions of digestion and assimilation; in the majority we find symptoms of gastric disorders, nausea, loss of appetite, flatulency, distention, constipation—all more or less confirmed. Our pen flies to the paper; we are about to prescribe; and for what?—for indigestion and malassimilation. But our patient consults us for cutaneous disease, not for his stomach or liver or digestive organs, with which he finds no fault, and which he is not aware of being in a state of disorder; while we, on the other hand, know the assimilative organs to be the cause of the irritation, and if they be restored to their healthy function all the cutaneous symptoms will subside and disappear. Undoubtedly, when the *force majeure* has been dealt with, we shall advise our patient as to some local treatment, an ointment, a powder, or a lotion for the immediate relief of the skin; but, practically, we treat the cutaneous affection as if it were altogether secondary in importance; neither need we care to inquire too minutely whether the anatomical lesion is a hyperæmia, a papule, a vesicle, a discharge, or a state of desquamation. And if we be in want of a name to include the cases of this description, we might adopt the word assimilation, and consider this as an *assimilative group* of diseases."—Dr. Corbett, in *Med. Rec.*

Sudden Accessions of High Temperature in Children.—In a letter to the *British Medical Journal*, Dr. Joseph Smith writes: I was called in to see a male child, aged 16 months, at 10 a.m., and found my little patient with swollen gums, which I lanced. I prescribed calomel, gr. ij. as the bowels were constipated, and a little saline mixture. The temperature was 101.5°. There was a little cough; but on carefully examining the lungs the physical signs were almost *nil*. At 6 p.m. I was informed that the calomel had acted twice; but as the child looked worse I again examined its lungs, and found the physical signs in the same condition as on my first visit.

Upon taking the temperature, my thermometer recorded 110°. Thinking the thermometer was at fault, I compared it with the others, and found the record correct. Upon visiting the child again at 10 p.m., the thermometeor registered 102°. In two days the child was comparatively well and the temperature normal.

To the same journal, Dr. Albert Kish writes: On May 7, 1887, I received an urgent summons at 8 a.m. to see C.L., a dark bright eyed, healthy looking girl, aged 12. She had not yet menstruated. I found her in bed, apparently well; pulse 72; temperature in mouth, 99°. The father explained to me that he made a practice of taking the temperature of his children with a clinical thermometer on occasions of illness, and as the child had complained of headache and some general discomfort shortly after waking, he placed his thermometer in her mouth, and found that it registered at 8 a. m. 105°. At 8.40 a. m. she seemed more uncomfortable, and, being unable to keep the bulb of the thermometer in her mouth in consequence of a rigor, he placed it in the rectum, and found that it registered 110. When I found, only twenty minutes later, that my thermometer only indicated 99° in the mouth, we concluded too hastily that my friend's thermometer must have been faulty; but while we were discussing this matter the child again felt uncomfortable. her pulse was then 144; she was pale, and said she felt more ill than ever previously. A slight shiver came on. I inserted the bulb of my thermometer into the rectum and found that it registered 110°. Five minutes later it still registered the same temperature, but ten minutes later it indicated 105°. At 5 p.m. the temperature was found to be 102.2°, and at 9.30 p.m. it was 99 both in mouth and anus, and the pulse was 84. She complained of occasional violent pains in the head, but neither pulse nor temperature was affected by them. The tongue was clean, and, but for the pains in the head and occasional slight rigors, she was fairly comfortable throughout the day.

ose of Gregory's powder administered after my rst visit acted at about 7 p.m. At 10 p.m. she ell into a sound sleep, which continued with slight ntermission till the morning, when pulse and temerature were normal. I may add that the bowels ad been regular, and that the urine was normal n all respects, and that, but for the fluctuations f temperature, there were no physical symptoms. —*Analectic.*

THE TREATMENT OF BRONCHO-PNEUMONIA IN CHILDREN BY THE APPLICATION OF ICE.—Dr. Angel Money urges, in the *Lancet*, the more general adaptation of the use of ice bags in the treatment of broncho-pneumonia. He writes that he as now treated in this way many cases of severe roncho-pneumonia in children and in infants with eneral success, no matter what might have been he cause of the disease. He has used it with uccess in cases of broncho-pneumonia, secondary o tracheotomy, and even with more favorable esults when it occurs as a complication of influnza and measles. The smaller the child the more narked are its effects. In very small infants nder one year of age the ice bags may be placed n the head, the hair having previously been hinned and shortened if necessary. The treatnent to be successful must be carried out with a vill and systematically. As a general rule, the ectal temperature affords the best guide to the pplication of cold, and those acquainted with roncho-pneumonia well know the highly marked emittent or almost intermittent character of these ffections. Ice bags have the drawback that they ften give rise to a little wetting of the child, but his has not in the writer's experience, proved inurious to the patient. Leiter's tubes have been ried, and have some advantages, being especially aluable when an intelligent nurse is in attendance. The condensation of moisture caused by the cold is f course inevitable, but this wetting may be rendered harmless by covering the ice bag or Leiter's ubing with a layer of Hartmann's wood wool or he compressed moss sphagnum. In severe cases here a rapid effect is required, two ice bags have een placed on the head, and one over the chief eat of consolidation in the lungs.

With a little management it is not difficult to keep hese in place; certainly not when the neuro-musular prostration is marked, as it almost always is n severe cases. The chief merits of this treatment onsist in the maintenance of the strength, not nly of the heart, but also of the respiratory entres and of the nervous and muscular systems. Although otitis media occasionally occurred, yet his has not been more frequent than in cases reated without cold. Albuminuria is not rendered orse by the cold, nor have any cases of hæmauria been observed. The urine has, at some rouble, been specially collected and tested in small infants. The duration of the disease is, on the whole, shortened. Convalescence is almost invariably rendered more rapid, doubtless because of the conservation of the child's energy.

It is superfluous to assert that ice does not merely act by stealing heat; its action is almost exclusively sedative. Physiologists would aver that it increased inhibition, and in that way made wrong right; because disease simply lowers resistance in the vital processes, and curative measures raise it. Ice influences different organs differently and this is most noticeable in the various parts of the nervous system. Its action on the cortex of the brain is, perhaps more evident in the production of sleep, restless movements rapidly subsiding if the cold be efficiently applied; probably, therefore, the whole system of motor centres and sensory centres is soothed, because morbid sensations and morbid motions tend to cease. On the heart and circulation the influence is also decided, but this influence is probably exercised directly and indirectly; for not only does the cold directly quiet the heart and steady the circulation, but the calming of the nervous system also acts indirectly in the same direction.

The respiratory centres are similarly beneficially affected. The heat regulating apparatus manifests most clearly the same beneficent action, and the temperature chart shows a similar harmonious effect. It is curious to observe the almost immediate cooling of the whole surface of the body soon after the application of ice to any part, this cooling effect being perhaps best marked when the ice is applied to the head; the hands, previously red and hot, become cool and slightly blue. The change is decidedly favorable, notwithstanding the supervention of the signs of feeble circulation in the exposed parts of the skin. Vomiting and diarrhœa, alone or in combination, may require treatment in the cases under consideration; the cold method does not increase diarrhœa, and it certainly tends to stave off vomiting. The employment of cold does not obviate the necessity of using stimulants, either of the ordinary sort, or such as act more especially on the heart and respiration. But cold renders them less necessary, and when they are required smaller doses are sufficient. There is, indeed, a saving of expenditure all round; the cost of the illness is lessened, and costs the child less expenditure of reserve strength.—*Am. Med. Dig.*

HEMI-CHOREA COMING ON AFTER PARTURITION.—This case was observed at Osler's clinic in Philadelphia. Mrs. X., the mother of three children, had an attack of inflammatory rheumatism, four months after the birth of her last child. From this she recovered, but four months afterward chorea appeared, commencing in the right thumb the twitching extended up the entire arm, and

subsequently appeared in the right leg, in which the motion was more marked than in the upper extremity. The choreic movements were confined to the right side. When she applied to the dispensary the above condition was noted; examination of the heart revealed a systolic basic murmur. No valvular lesion was detected. The movements were much worse in damp or stormy weather, so that at times she was unable to walk across her room. She was treated by Fowler's solution, five drops three times daily, and increased until doses of ten or twelve drops were taken, or half a dram daily. An interesting point in the case consisted in the fact that the patient had never had chorea in childhood, and none of her family had been similarly affected.—*Phila. Med. Times.*

Electrolysis in Urethral Stricture.—This subject has of late been occupying a large portion of the attention of genito-urinary surgeons. The diversity of opinion upon the usefulness of this method is so great, and each adduces such weighty arguments, that the non-expert is reduced to a state of despair. One of the latest expressions on the subject comes from Dr. C. A. Bryce in the *Jour. of Cut. and Genito-Urinary Diseases.* He expressed himself thus: "We have a large number of cases we could report of patients now living and in the enjoyment of perfect health, relieved of organic stricture and *permanently cured* by electrolysis. We have not said anything about *failures* in treating cases by eclectrolysis. This is not our object and does not concern us in this article. Our object is simply to show that electrolysis *is capable of permanently curing the worst strictures of every grade and character*, whether in the membranous or pendulous uretha. That there are, and will be, failures by this method, we are willing to admit, but were we to trespass further upon the space allowed and the patience of our readers, we could easily demonstrate that the fault, instead of being chargeable to the method employed, should be laid upon the shoulders of bunglesome and unskilled operators, who, like faulty mechanics, are ever ready to blame their tools.—*St. Louis Med. Jour.*

The Treatment of Phthisis with Calomel.—Dochmann, in the September *Therap. Monats.* relates his experience with the use of calomel in phthisis. Administered in the first and at the beginning of the second stage, calomel improves the appetite, diminishes the cough and fever, and dispels the night sweats and the objective symptoms. At the end of the second and at the beginning of the third stage, it reduces the fever, checks or diminishes the diarrhœa, and improves the general condition. Whether calomel has a specific action upon the local changes in the lungs or influences the life and development of the tubercle bacilli or checks the progress of the destructive process, only more extensive observations can determine. The following formula may be used:

℞.—Hydrarg, chlorid. mitis, . . grs. x.
Pepsini, ... 3 j.
Ergotine (Bonjean's), . . . grs. ij.
Ext. glycyrrhizæ q. s. ut. ft. pil. No. 60.

On the first day the patient takes six pills (two at intervals of two hours), on the second day five, on the third day four, and from the fourth day he takes two pills, thrice daily, throughout the treatment. Every fifth or sixth day, the calomel is intermitted for two or three days, during which time iodide of potassium may be given. The size of the first dose depends upon the fever; should the fever increase, the dose of calomel is increased to twelve to fourteen pills a day.—*Wiener medizin. Presse.*

Radical Cure of Hydrocele.—Mr. Henry Morris in speaking of this interesting subject states what is well known, that the only radical cure consists in obtaining a complete obliteration of the cavity of the tunica vaginalis *(Am. Jour. of the Sciences).* The only cases in which it is preferable to incise or excise are, according to him, the following:

1°. When we are in doubt as to the precise nature or relations of the hydrocele sac—*e. g.*, as to whether the tumour is a congenital hydrocele, or a hydrocele of a hernial sac. 2°. In some cases, when hernia, whether reducible or irreducible, complicates a hydrocele. 3°. When a foreign body in the tunica vaginalis is the cause of the hydrocele. 4°. When we have reason to think that the hydrocele is caused by, or associated with, a diseased condition of the testis, for which castration would be the right treatment. 5°. When, as in a case recently operated upon, a vaginal hydrocele is associated on the same side with an encysted hydrocele of the cord and a bubonocele. In this last case excision of both the hydroceles, and the hernial sack, and closure of the pillars of the external abdominal rings were successfully accomplished at the same time.

Cyst in the Heart.—At a recent meeting of the London Pathological Society (*The Lancet*), Dr. W. B. Hadden brought forward a specimen of cyst in the heart. The patient was a woman of sixty-six, who died of cirrhosis of the liver. There were no symptoms pointing definitely to the condition of the heart, and nothing in the history to explain the origin of the cyst. It was an inch and a half in diameter, globular, thin-walled, and situated in the inter-auricular septum. The contents were pink and grumous, microscopically, were found to consist of finely granular fatty material. The walls were of loose, fibrous tissue, and there was no evidence that it was hydatid,

ermoid, or serous; its nature and origin were bscure.

METHYLAL INJECTIONS IN DELIRIUM TREMENS.—raft-Ebing advocates the use of methylal subıtaneously in delirium tremens. Although large oses are required by the mouth to procure sleep —often as much as sixty grains—administered ıbcutaneously, one and a half grain is sufficient, lthough two and often six hours are required to ring about the desired result. Earlier investigaors, such as Mairet and others, spoke of it as a liable and not disagreeable hypnotic, but they ften resorted to doses of one and a half to two rachms. If Kraft-Ebing's results (restfulness nd sleep) after minute doses, given subcutaneously, rove the rule, it will add materially to the value f the drug.—*Med. Press.*

PACZKOWSKI reports a very large series of 32 pneumonias treated by Kermes mineral (antion. sulphurat.). The mortality in this great ries was only 1.69 per cent.! The drug should e freshly prepared, and the earlier given the etter. He makes the astonishing statement that given on the second or third day the crisis occurs ithin twenty-four hours, sometimes in eight. It given in the following formula:

Kermes mineral	gr. xxx.
Ext. digitalis	gr. ijss.
Opii	gr. j.

Divide in pil. no. xxxij. Two pills every two ours, and after the crisis two every three hours ll convalescence is established.—*Am. Jour. Med. iences.*

TREATMENT OF DIPHTHERIA.—The three rules be followed for the successful treatment of phtheria are, according to Renou:

To saturate the inspired air with antiseptics.

To feed and tone the patient to the greatest ssible degree.

Never to touch the throat with any medicaent, and to give internally only alcohol and inine.

The facility with which this treatment may be plied, especially in the case of children, the rtainty and rapidity of absorption, are elements hich recommends a thorough trial. — *Bulletin néral de Thérap.*

THE TREATMENT OF SYPHILIS BY INUNCTION.—ournier, of Paris, *(Rev. Gén. de Clinique et hérapeut.)*, in a clinical lecture, dwells upon the eatment of syphilis by inunction. The patient first placed under a tonic regime; laxatives are t prescribed; the patient eats as much meat as pleases; he takes walks—in fact, he is advised to spend much time in the open air; hydrotherapy and sea baths are ordered. Among ointments for inunction, that of the bichloride of mercury and the ordinary blue ointment are to be preferred. Recently, soaps, composed of equal parts of mercury and soap, have been proposed. The disadvantages of these are, that the inunction requires too much time. The dose of the ointment (unguent. hydrarg.) at first is a drachm; in the course of time it can be increased to a drachm and a half and two drachms. In the case of women and children, in view of the lesser tolerance, correspondingly smaller doses must be used. With children, thirty-five grains should not be exceeded This dose is sometimes indispensable, but it should be remembered that fifteen to thirty grains may be given to infants only a few days old, without harm. In cases of severe syphilis, syphilis of the brain, and during a course of treatment with sulphur baths, in adults, the dose mentioned may be exceeded. Every application should be made with a definite quantity of ointment—for instance, seven drachms of mercurial ointment are ordered for one week, in several equal parts. As a rule, the inunction should be performed but once a day, preferably before retiring for the night. The lecturer applies the friction to the side of the chest. This offers a large extent of surface, and the patient himself may undertake the application

Two precautions are to be observed: 1. The ointment should not be rubbed into the scrotum, the groin, the pubes, and the axilla, because of too ready absorption. 2. To avoid irritation of the skin, the site of application should be varied, alternating the left and right side of the chest, the inner surfaces of the arms and thighs. The friction is continued fifteen minutes for a drachm of the ointment, thirty minutes for a drachm and a half or two drachms. The application must not be a mere annointing, but the skin must actually be rubbed, but not with great energy. The parts treated are covered with cotton, linen or flannel; if the chest, held in place by a binder; if an arm, by a shirt sleeve, etc. The ointment remains upon the affected part throughout the night, and is removed in the morning with soap and water. Twice a week a thorough bath is enjoined. Nothing definite can be stated relative to the number of applications. If a patient can be kept under observation, treatment should be continued for from two to four months. It is agreed that it should not be too long continued, because, after a certain time the mercury is no longer tolerated by the system. If the treatment becomes objectionable, the inunction may be omitted for a few days, to be again renewed.—*Deutsche medicin. Wochenschr., Med. News.*

THE VALUE OF VACCINATION.—A Leicester guardian, writing to an evening contemporary,

dwells with much satisfaction on the immunity from small-pox enjoyed by Leicester, which has escaped any special prevalence of this disease since 1872, when 346 person lost their lives from this cause. During the last ten years, he says, more than 20,000 persons remained unvaccinated, and he argues that, if some eight or ten vaccinated hospital nurses or officials can save the 140,000 people in Leicester from the ravages of small-pox, double the number ought to have saved Sheffield. We have already pointed out that, for the purpose of estimating the protection afforded by vaccination, it is necessary to compare the incidence of small-pox upon vaccinated and unvaccinated persons respectively living under the same conditions, and the Sheffield differs from Leicester in one important particular—viz., that it had in its midst a small-pox hospital. The effects of small-pox hospitals have come to be well recognized since Mr. Power studied this subject in connection with the Fulham Hospital, and Mr. Ritchie has shown in the House of Commons that the unvaccinated in Sheffield suffered out of all proportion to the vaccinated. Since that time the Sheffield outbreak has been the subject of detailed investigation by the Local Government Board, and it may be anticipated that the report on the inquiry will deal with this question. Before the Leicester guardians attempt to draw conclusions from the Sheffield epidemic, they should have all the facts before them, and these will not be obtainable until the official report is finished.—*Lancet.*

THE NEW HYPNOTISM.—The peculiarities of the Nancy school are these: They do not believe in the three phases of hypnotism—lethargy, catalepsy, and somnambulism; hysterical patients, such as were used by Charcot, are not good subjects for studying hypnotic phenomena. The hypnotic state is not a pathological, but a normal, nervous condition, allied very closely to sleep; persons may be hypnotized in very varying degrees of intensity in some of which the subjects hardly seem to be in a different state from the normal one. The method of hypnotizing patients should always be by simple suggestion. The old method of using brilliant objects fixing the patient's eyes, etc., is faulty, and likely to cause injury. The new method, properly applied, is harmless. This is the "suggestive method": The patient is placed in a chair in front of the operator. The operator then talks to the subject in a firm and confident voice, assuring him that he will go to sleep in a short time, telling him to make no resistance—that his sleeping will be natural, that nothing will be done to worry or fatigue him, that he will dream pleasant dreams, that he will wake up feeling better; then that he is feeling drowsy, his eyes heavy, objects look confused, the lids are falling, they are closed—in a moment more the patient goes off to sleep. All this may require some little time—five to fifteen minutes. It may fail the first time and succeed the second. It is not always possible or necessary to put the patient to sleep; the effect may be gained short of this. The proportion of persons of all ages found to be hypnotizable by Beandis was about eighteen or twenty per hundred. Children up to the age of fourteen are very susceptible. After the age of fifty-five susceptibility lessens. Men are almost as easily affected as women; but persons of a docile mind, and those trained in some degree of mental discipline and capacity for submission, such as soldiers and artisans, are more sensitive. The class of cases in which good results have been reported are rheumatism, neuralgia, alcoholism, morphine habit, various functional nervous diseases, and amenorrhœa. It has been applied also in the treatment of extremely refractory children.

The particular point made is that Bernheim and others in France have been working out on a rational basis the same art that the mind-curers in this country have been empirically applying. In other words, mind-curing and the "suggestion" of Bernheim are the same thing; the docile patients who sit about the parlors of the mind-curers, if affected at all, are really experiencing hypnotism in some of the minor grades described by the French authors. Practising physicians, no doubt, in many cases cure unconsciously by "suggestion." They should, however, it is thought, know the scientific basis of their therapeutics, and perhaps extend its practical application.—*Ed. N. Y. Med. Rec.*

CHROMIC ACID IN EXCESSIVE SWEATING.—A circular has been sent to all the Prussian Army medical officers, advocating chromic acid as an economical and efficient means of checking excessive perspiration. In hyperhidrosis of the feet the application of a ten per cent. solution, repeated every three or six weeks, is sufficient to prevent any inconvenience from this source.—*Med. Press.*

EMMENAGOGUE POWDER:

℞.—Powdered absinthe . gr. xxxviij.
Powdered yarrow . . gr. xxxviij.
Powdered saffron . . gr. xix.—M.

Divided in pulveres No. V.

Sig.—One powder each day, for five days preceding the expected menstrual period.—*Med. Prog.*

A woman in Edinburgh, Scotland, is pregnant at the age of 62, it being her twenty-third time. She was also pregnant at the age of 47, 49, 51, 53, 56, and 60. The case is attracting much attention from the physicians of that place, as it is a rare one.—*Wes. Med. Rep.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address,* DR. J. L. DAVISON, 12 Charles St., Toronto.

☞ *Advertisements inserted on the most liberal terms. All Letters and Remittances to be addressed to* DR. C. SHEARD, 320 Jarvis St., Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

TORONTO, DECEMBER, 1888.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

TRINITY ANNUAL BANQUET.

The twelfth annual banquet of Trinity Medical College was held at the Queen's Hotel on the evening of the 13th ult. Over two hundred persons, including students, professors and guests sat down about 8 o'clock to do justice to the magnificent bill of fare provided for the occasion. The room was handsomely decorated, and nothing but praise was heard for the manner in which the management of the Queen's did their work.

Mr. H. Chapple occupied the chair, supported on his right by Dr. Geikie, Dean of the Faculty, the Rev. John Langtry, Mr. H. E. Clark, Mr. Walter S. Lee, Mr. P. Hughes, Rev. Dr. Stafford, Drs. Stark (Hamilton), Bray (Chatham), Davison, Stuart, Hawley and Auld, whilst on his left were A. MacMurchy, M. A., Revs. A. H. Baldwin, G. M. Milligan, Drs. Grasett, Sheard, Teskey, MacFarlane, Covernton, Powell, Harris, O'Reilly, Temple, Graham, McPhedran, Elliott, Ardagh, Cowan, Langford and Thompson, Mr. A. Marling, Profs. Kirkland and Shuttleworth, and others.

The viands were warmly discussed for about an hour, when the president, Mr. Chapple, called the assemblage to order, and in a very happy, thoughtful and eloquent speech, proposed the health of Her Majesty, the Queen. This was drunk with great enthusiasm, in cold water, as were all the toasts of the evening. And just here it may be mentioned that there were fewer toasts put down than usual, a most wise arrangement, for which the Committee of Management have, we are sure, the thanks of both those who were called upon to respond, and those who were not. The Committee also deserve the greatest credit for the smoothness with which the whole affair ran, as there was no perceptible hitch in the proceedings from first to last. Fortunately for the credit of Trinity and of the medical students of Toronto generally, there was none of that unseemly hilarity which has, on previous occasions, marred the enjoyment of similar gatherings. Sobriety, gentlemanly conduct, and perfect good humor were the characteristics of the banquet, a matter of sincere congratulation to all concerned. Especially is this true at the present juncture, when the press, and we think the great majority of the public are making severe strictures upon the conduct of the medical students of the city. While we do not wish to appear in the rôle of champions of the students, we do say this, that they are often more sinned against than sinning, and that a great many misdoings are laid to their charge of which they are entirely innocent.

Dr. Geikie, in response to the toast, "Our Faculty," made a stirring and eloquent speech, which was listened to with the greatest pleasure and attention by all present.

Col. G. T. Denison responded, in his happiest strain, to the toast of "The Army, Navy and Volunteers." Messrs. W. S. Lee and P. Hughes spoke as representatives of the Toronto General Hospital.

Dr. O'Reilly, Superintendent of the Hospital, was received with the greatest enthusiasm. He made a capital speech, and was cheered to the echo. No doubt could remain in the minds of those present that no man could be more popular with the students than the present respected head of our hospital, of which institution we may well be proud.

Dr. Gilmour responded for "Our Graduates. He indulged in a little fun at the expense of the clergy, saying that while the latter preached, they, the medical profession, practiced. Rev. Mr. Baldwin afterwards got in a counter, by saying that while the doctors killed their patients the clergy had to bury them.

The toast of the undergraduates was eloquently responded to by Mr. Homer Mason, who expressed the views of the graduating class in a most able manner.

The "Sister Institutions'" toast was responded to by Mr. McClellan, representative of McGill College, Montreal; Mr. Harkness, of Queen's College. Kingston; Mr. S. F. Houston, of Trinity University, and Mr. Rush, of the Dental College.

A number of other toasts were honored during the evening, including the learned professions, Press, Ladies, etc.

One of the most pleasing features of the evening was the singing of the Glee Club of the College. This valuable auxiliary to the rest of the entertainment had been by no means forgotten. Mr. Robertson rendered very creditably two cornet solos, which received hearty encores. An Italian string band in the gallery rendered their usual sweet strains at various intervals.

The singing of the National Anthem brought to a close the 12th and most successful and enjoyable banquet that Trinity Medical College ever held.

PROFESSIONAL DIGNITY AND CONTRACT PRACTICE.

To the medical profession belongs a dignity and a position handed down to its present members chiefly through the efforts of those of our predecessors whose high principles and feeling would not allow this dignity to be sacrificed even in a keen struggle for existence. How much real value this position of the medical profession has to-day must be apparent to any one who is at all acquainted with the ordinary work of a physician, and it is the duty of all to see that this position be constantly and firmly maintained. Many are the inducements held out to the practitioner to make money out of its barter and sale, and, in this age of cunning, deep and numerous have been the schemes planned by unprincipled people to induce those of us who may have felt the reverse of fortune to sell their self-respect in a moment of need, and, it may be a surprise to some to learn what these devices are. There exists a scheme among a few "*very thrifty*" merchants of having their employees furnished with medicine and medical attendance by contract. Some poor doctor is employed by the firm to take charge of say one hundred or more employees at one hundred dollars per year—and this might be excusable on the part of such establishment if it were simply for the protection and assistance of those who might fall ill whilst in their employ through accident or overwork; but, so far from such being the case, some small sum like ten cents a week is deducted from the employees to pay for medical attendance, thus forcing the poorly paid mechanic or shop girl to pay five dollars and over per year for what the firm buys for a dollar, and selling at an immense profit the brains of the poor medico. Whilst the greatest sympathy is to be given to that physician who, with the responsibility and care of a family pressing upon him, is manfully struggling to procure for them every advantage; yet, we assert, the labours of the physician are heavy enough and he should have all of their profit. Something ought to be done to stop the wholesale inroads into the rights of the profession by schemes for contract practice. In the City of Toronto, we understand, there exists an organization for ensuring the lives of artizans and mechanics, and the medical men making such examinations are paid at the enormous rate of "*ten cents*" per risk, and still worse, this life insurance organization was originated by a medical man of high position. We are not inclined to favour any form of contract practice where the precise number of visits cannot be specified; it is of all practice the most unsatisfactory. The majority of the so-called benevolent orders rely for their popularity and existence, to a great extent, upon their physician, as his services constitute the chief benefit. Whilst we would not wish to have the physician a being without self-sacrifice or benevolence, we earnestly hope, before long, some more satisfactory and uniform plan may be adopted which will satisfactorily deal with this growing evil.

THE TOXIC ACTION OF THE POTASH SALTS.

The idea that all the compounds of potash act as protoplasmic poisons, and are therefore muscle destroyers, has long been held by pharmacologists and practitioners. M. M. Chevron and Foques, among other conclusions place the following as important:—"The bromide of potash joins to its sedative action on the nervous system a depressing action on the muscular system; it is thus a neuro-muscular agent." They also state that the bromide of soda is not a muscular depressant and

that the ammonia salt is a stimulant. Ringer, Guttman, Bernard, and other eminent authorities have agreed that the potash salts are far more poisonous than those of soda, and that the potash salts are all equally deleterious in the same space of time "if administered in the same way." The heart has been considered as the organ which suffers most, and it has been held that it is always depressed and eventually paralyzed by the action of potash. While their views have been widely accepted, the ordinary medical man has prescribed bromide of potash perhaps twenty times where he has prescribed the corresponding soda salt once. Perhaps this has been due to habit, or fashion, even when the supposed poisonous action of potash was well known.

The experiments of most of the observers in the field, appear to have been made by injecting the potash salt directly into the blood, under which circumstances undoubted depression has been noted.

But it is now held that they act in quite a different manner when introduced into the stomach. Professor Germain Sée has lately, in a communication to the Academy of Medicine at Paris, made the statement that this toxic action of potash can not be shown to be true, when it is taken by the stomach. He also states that while the potash salts are depressants if thrown directly into the circulation, the soda salts are but slightly less so. Bunge has made some interesting calculations, by which he shows that a man who lives chiefly on potatoes consumes from 1000 to 1200 grains of potash, in twenty-four hours. If the potash were so prejudicial to muscular tissues we should expect to find here a very serious depression, but it is not so. While Bunge's illustration is striking, it is by no means conclusive, for we must take into account that in potatoes the potash is prepared, and compounded in the laboratory of nature, a vastly different matter from its preparation and compounding in the chemical laboratory. Whatever be the scientific value of the experiments heretofore made, Sée comes out bluntly with the statement that he prefers the action of iodide of potassium to that of the soda salt in the treatment of affections of the heart and lungs. Perhaps the truth is that we have entertained a too exaggerated idea of the poisonous effect of potassium salts, and that administered by the stomach and in medicinal doses a deleterious effect upon warm-blooded animals can only be produced, if at all, by their very long continued use.

THERAPEUTIC NOTES.

Treatment of Endometritis.—For the treatment of the above affection, Professor Polk, in a recent clinic at Bellevue, strongly recommended the packing of the uterine cavity with iodoform gauze. It is a recognized fact that in inflammation of any cavity, or part of the organization, one of the first things to be obtained is good drainage, so that the effused inflammatory materials may be got rid of as soon as possible. Heretofore attempts have been made to drain the endometrium by means of hollow glass plugs, uterine stems, etc.; but the great objection to these means has been the expulsion of the plugs by uterine contractions consequent upon the irritation which their presence inevitably sets up. This difficulty is overcome by the use of iodoform gauze, which secures thorough drainage by capillary attraction, and the iodoform being itself an excellent antiseptic, is applied directly to the diseased uterine mucous membrane, and its beneficial effects in endometritis are already well known. The operation is performed as follows: the patient is placed either in Sim's position or the dorsal decubitus, the vagina is then thoroughly douched with 1-2000 bichloride, and it may be here stated that all vaginal operations are now performed in New York with nearly as much antiseptic precaution as are laparotomies. Sim's speculum is then introduced and held by an assistant, the posterior lip of the os is laid hold of with the vulsellum forceps and drawn down. Then the uterine cavity is thoroughly irrigated with 1-2000 bichloride, by means of a uterine irrigator, the return tube preventing the entrance of any of the fluid into the Fallopian tupes, Ellinger's dilators are now passed and the cervical canal well dilated, special care being observed that the internal os is included in the dilatation, and unless this point is attended to the treatment is apt to prove a failure.

The uterine cavity is again irrigated with 1-2000 bichloride; narrow strips of iodoform gauze are then wound around the point of a uterine sound and the endometrium thoroughly packed, a piece of guaze being allowed to hang into the vagina in

order to secure the necessary drainage. The patient is then placed in bed and at the end of twenty-four hours the operation is again repeated. For the primary packing anæsthesia is generally necessary on account of the dilatation of the cervical canal, although this can be obviated by the use of a four per cent. solution of cocaine. For the subsequent operations no anæsthetic or dilatation is required as the canal is usually patulous enough. If, in any case, the vascular type of endometritis is suspected, the uterus should be first curetted and then packed, although this is not necessary, as good results have been obtained without the preliminary curetting. Prof. Polk then commented on the intractability of endometritis to all previous modes of treatment, and stated that in his experience twelve packings had generally sufficed to secure a complete cure and in some instances the happy result had been secured in six seances. As yet this method is on trial, but very favorable reports have been stated by many other gynecoligists.

Report of October meeting of the section for Diseases of Children, of the New York Academy of Medicine: After the usual preliminary business had been dispensed with, Dr. Jacobi presented two cases of syphilitic cirrhosis of the liver. In the one evidences of the lesion were well marked as ascites, fluctuation, etc., and on percussion the liver was found to be much diseased in size. One of these cases had been presented to the society one year ago, and under the treatment of iodide of potash had been completely cured, as the liver is now of normal size. The same treatment is to be pursued in case No. 2, and a like favorable result is to be anticipated. Dr. Jacobi then presented a case of congenital syphilis in a child twelve days old, with marked enlargement of the epiphyses of the bones due to syphilitic ostitis, and also occlusion of the external ear. Treatment suggested was the iodide of potash, as already under its influence a marked diminution in the size of the epiphysis had occurred, and the question was raised as to the cause of the occlusion. Dr. Jacobi advanced the view that it was due to syphilitic ostitis and hyperplasia, and not to a defect in development. In the discussion which followed as to the best method of treatment of congenital syphilis, Prof. Smith was in favor of the continuation of small doses of the bichloride of mercury with the iodide of potash, while Prof. Jacobi, and the majority of the Academy advocated the exclusive use of iodide of potash. Prof. Winters then presented a case of a fine healthy male child, age five years, who six months ago had lobar pneumonia and made an excellent recovery, but four months ago slight deafness was noticed, and from that time the boy has gradually lost his power of speech and now suffers complete aphasia. An interesting discussion then took place as to the cause of the aphasia. Dr. Tweed suggested meningitis as being a frequent complication of pneumonia, this had now become chronic and pressing upon the speech centre resulted in aphasia. Profs. Jacobi and Winters opposed this view, as no history of meningitis could be obtained, and the ears had been examined by an otologist, and the hearing found defective on both sides. They inclined to the view that as no other symptoms of chronic meningitis could be elicited, that the aphasia was simply due to the otological defect, the boy being unable to hear the words, thus had no power to reproduce them. Dr. Warner then presented a case of congenital syphilis with Hutchinson's teeth well marked. Dr. Heubner now read a paper on "Intubation of the larynx for diptheritic laryngitis," by means of O'Dwyer's tubes. His report included personal experience in ninety-two cases. In all cases of diphtheria he recommeded the use of minute doses of bichloride of mercury $\frac{1}{100}$ of a grain every half hour (from this dose he had observed no toxic effects), combined with the use of steam inhalations internally and warm fomentations externally. He believed by these means that the spread of the diptheritic inflammation could be more effectually checked than by any other therapeutical resource at our command. When the larynx was involved he advocated intubation by the intermittent method. This plan embraces the use of a smaller tube than is recommended by O'Dwyer's scale. After the introduction of the tube it is coughed up in a number of hours and with it comes a croupous cast of the larynx. The child can now be fed and stimulated if necessary, and then the tube re-introduced. The time that the tube remains in situ is generally five or six hours, and in some cases it may not be required to be introduced again. The advantages he claims are that the child can be fed and stimulated when it is coughed up, and the expulsion of

he laryngeal cast renders the introduction of the ube unnecessary, until the cast is again formed.

Dr. Brown then read a report of 138 cases. Ie is a very young man, said not to be over thirty ears of age, and has the reputation of being the ost successful intubator in the city. In twenty-ix per cent of cases he has had favorable results, e advises the use of bichloride in 1-100 grain oses, steam intubations internally and warm omentations externally, but strongly advocates he continuous method of intubation and leaves he tube in the larynx until there is no further ndication for its use. In the discussion which ollowed, the prevailing opinion appeared to be rgely in favor of continuous intubation.

Notes.

Sulfonal, the new hypnotic, is now being ex-ensively tried in the various hospitals throughout he city. From all quarters very favorable reports re received, although, as yet, the test has not een of sufficient duration to determine its exact alue. It is exhibited in doses ranging from O grains to 1 drachm. Generally in half-an-hour t is followed by a sound sleep of from four tc six ours' duration. As yet no unfavorable after ffects have been observed, the patient awakening efreshed and thus giving it a great advantage ver many of the common hypnotics in use. Good esults have also been obtained from its use in ental diseases as acute mania, hallucination, cute alcoholism, etc.

For chronic rheumatism the following is a fav-rite prescription with Professor Loomis:

℞. Kali acetatis, ... ʒii.
Sodii iodidi, ... ʒii.
Magendies solution, ... ʒi.
Vinum colchici sem. . . . . ʒii.
Syrup limonis, ... ʒi.
Aq. cinnamomi, ... ʒiii.

Sig.—ʒi four times a day.

Many practitioners are not sufficiently impressed ith the power of pilocarpin in cutting short the uration of malarial chills; it is not, by any means, new remedy, having been first brought to the otice of the profession some years ago by a ellevue house physician. In this hospital it is till a routine practice when the cold stage of an intermittent is first noticed to give immediately $\frac{1}{8}$ grain of pilocarpin hypodermically, and, in nearly every instance, in from ten to twenty minutes, the sweating stage is established. It has no curative action over the malaria whatever, it simply acts as a symptom medicine and the malaria must be treated by quinine or Warburg's tincture.

Before all laparotomies in New York it is customary to give $\frac{1}{100}$ grain atropia sulph. to act as a respiratory stimulant. It used to be combined with $\frac{1}{4}$ grain of morphia, but of latter years the morphia is left out.

Professor Winters in administering calomel to children gives it in $\frac{1}{10}$ grain doses in the convenient form of the triturates every hour until a movement takes place, and it is seldom necessary to give more than half a grain. In the erysipelas pavilion of Bellevue where a cathartic is indicated it is given in $\frac{1}{6}$ grain doses every hour, starting at 5 o'clock in the morning, and by 10 o'clock the patient has several plentiful movements. It seems to act in these small doses just as effectually as 10 grains, and has the advantage of producing none of the after effects.

Professor Sands, the distinguished surgeon, died suddenly in his carriage last week. The autopsy revealed embolism of the coronary arteries due to atheromatous degeneration of the vessels. It is a remarkable co-incidence that the late Marion Sims expired in a like manner with the same affection.

The Abortive Treatment of Gonorrhœa—It is rare for a practitioner to get a chance to treat a case of gonorrhœa before it has run for some days. Yet few patients feel satisfied without an attempt at abortive treatment. Regarding this, Dr. Mauriac has given (*Jour. Am. Med. Assoc.*) the following conclusions:

1. The abortive treatment is indicated and has some chance of succeeding in acute gonorrhœa only during the first hours of its outset. 2. All attempts to cut short an attack of gonorrhœa during its period of progression and when it reaches its height are useless or dangerous; one obtains only delusive cures. 3. The antiseptic practice at once (*d' emblée*), suggested by the microbian theory of gonorrhœa, has till now produced only delusive results. 4. It is indispensable to

submit acute gonorrhœa to an antiphlogistic treatment until the almost complete disappearance of the most inflammatory phenomena. It must proceed to the proper stage of maturity before any repressive medication should be had recourse to. 5. This latter gives decisive and durable results only in the involutive phases of the specific catarrh. 6. The agents of repressive medication are copaiba and cubebs internally, the sulphate of zinc in injections. 7. The balsam should be given first; it sometimes of itself produces a definite cure. In the greater number of cases, while continuing its use, astringent injections may be resorted to. 8. The duration of the repressive medication should be short. Should it not soon give the results expected of it, it must be given up and antiphlogistics resorted to. 9. It is by the antiphlogistic medication that the treatment of acute gonorrhœa or imperfectly cases should be commenced. These cures which return almost incessantly are seldom or never subdued in a definite manner.

Cocaine in Pleurisy.—Dr. Marsh writes to the *Br. Med. Jour.*, with reference to the use of cocaine for the relief of pain in pleurisy. He recommends that one-fifth or one-fourth of a grain be injected subcutaneously at the most painful spot, and the injections repeated once or twice daily. He claims that not only is the pain relieved, but that cocaine is superior to morphine for this purpose, as it is free from many objectionable secondary effects, such as constipation and a tendency to pulmonary congestion, while by contracting the vessels a most decided check is put upon effusion into the pleural cavity.

Bandaging the Extremities for Pulmonary Hæmorrhage.—Seitz (*Archiv. f. Klin. Med.*) recommends bandaging the extremities for pulmonary hæmorrhage; first the upper extremities, at or about the middle of the arm, then the lower at the middle of the thigh or immediately below the knee, using silk bands about three-quarters of an inch wide; or, in case of necessity, strips of any sort. By imprisoning the blood, the tension of the left ventricle is diminished, and contraction of the vessel in the area not included occurs. The half hour during which the bandages are retained suffices for the formation of a thrombus at the site of hæmorrhage. The method was used in the time of Hippocrates.

Camphorated Carbolic Acid.—In the *Correspond. f. Schweitzer Aerzte*, Dr. Schneider recommends camphorated carbolic acid as an "elegant, reliable, and very convenient antiseptic preparation." As is well-known, when one part of crystallized carbolic acid and three parts of powdered camphor are shaken up together in a test-tube, a colorless limpid fluid is produced. This mixture does not possess either the characteristic odor or the rubefacient and caustic properties of carbolic acid, while the antiseptic power of the latter remains intact. When placed on the tongue the compound causes but very slight burning sensation. It has no effect on polished steel.

Poison Bottles.—A very good and simple contrivance has been put on the market by Mr. Miller of Minneapolis, by means of which poisoning by the thoughtlessness of druggists may be reduced to a minimum, if not entirely done away with. With the stopper of the bottle is a plate having sharp points on its outer side, and a fastener on its under surface to attach it to the stopper. When bottles of this kind are used, the sharp points will grasp one's hands thoughtlessly applied.

Ammonium Chloride in Neuralgia.—Dr. W. T. Green speaks highly (*Med. Press*) of the value of the above drug in neuralgia. He cites a case in which its administration was followed by prompt relief. The remedy is better known as efficient in that ill-understood disease, muscular rheumatism. If, however, it be useful in neuralgia its sphere of usefulness will be greatly enlarged. He gives it in doses of 20 grains.

Hot Wet Pack in Acute Bright's Disease.—It is held (Carpenter, *Pract.*) that the constant application of the hot wet pack in acute Bright's disease is not without some risk. He holds that the temperature should be taken at least every three hours, and oftener in cases of severe pyrexia. He states that hot air is certainly safer and in all respects preferable.

For Urticaria.—Dr. O'Connor recommends for this troublesome and intractable disease (*Lancet*) a solution of boracic acid, 10 grains to the ounce, to be applied by a sponge immediately on the appearance of the wheals. Internally the patient should take small doses of liq. arsenicalis, with sod. bicarb. and mag. sulph.

THE YELLOW FEVER GERM.—The celebrated Dr. Gibier, of Paris, has succeeded in obtaining material from which to make cultures of the specific germ of yellow fever. The patient was the head nurse of the hospital at Jacksonville. We may, therefore, expect to learn with exactitude all that culture, the microscope and inoculation in animals can teach us as regards this dread disease.

TREATMENT OF GONORRHŒA WITH IODOFORM.—Dr. Paul Thiéry, in the *Progrès Méd.*, recommends injections of finely powdered iodoform suspended in sweet-almond oil in gonorrhœa. He cites six cases which were cured in less than two weeks with about seventeen injections. Aside from its antiseptic properties, the injections of iodoform greatly relieved the pain of the disease.

GLYCERIN SUPPOSITORIES IN CONSTIPATION.—Fifteen to twenty minims of glycerine in capsules act in as many minutes, producing the same effect as the glycerin when given by the syringe. It need not be said that the suppository is much more convenient.

ANTIPYRIN IN AORTIC ANEURISM.—Germain Seé (*Jour. Am. Med. Assoc.*) says, that antipyrin is useful in the above disease. It calms the impulse of the heart, and also eases the sharp pains, cardiac oppression and anginous sensations, so common in cases of aortic aneurism.

FOR severe itching about the anus, the following is recommended, (*Therap. Monats.*)

℞—Cocainæ hydrchlorat, $\frac{1}{10}$ to $\frac{1}{2}$ pt.
Lanolin puriss. . . . 30 pts.
Vaselini, ...
Ol. olivæ, ... āā 20 pts.
Sig.—Apply locally.

THE *Maritime Medical News* is the title of a new medical journal, to be published bi-monthly, at Halifax, N. S. The object of this enterprise is to chronicle the records of medical and surgical science, in the Eastern Maritime Provinces. It consists of 26 pages of toned paper, and presents a fairly good appearance. We wish our co-laborers every success in their new venture.

DR. CHARLES H. MERZ, the house physician to University Hospital at Cleveland, Ohio, April 25th, 1887, said: "I have made use of PAPINE for some time past, both in hospital and private practice, and find it a most agreeable substitute for morphine and opium. It is the anodyne *par excellence.*

FLORENCE NIGHTINGALE is now a patient in a London hospital which she herself founded. It is said that she is suffering from an affection of the spine, which originated as long ago as the Crimean war, when she ministered so faithfully to the wants of the sick and wounded soldiers.

THE following names of Canadians appear in the lists as having recently passed the final examination of the Royal College of Physicians and Surgeons, of Edinburg, and Surgeons, of Glasgow, R. E. Walker, W. H. Merritt, C. McLeod, Miss Elizabeth S. Mitchell, P. W. Thompson.

Dr. C. A. Hodgett's, has recently passed the L.R.C.P. London examination.

Dr. Price-Brown, of Galt, is about to remove to this city, where he intends making a specialty of the treatment of the throat and lungs.

FLOATING KIDNEY:—Dr. Linder has recently published a work which goes to prove the remarkable assertion, that floating kidney exists in about one sixth of all females.

Books and Pamphlets.

TREATISE ON THE DISEASES OF WOMEN, by Alexander J. C. Skene, M.D., Prof. of Gynecology in the Long Island College Hospital, Brooklyn; formerly Prof. of Gynecology in the New York Post-Graduate Medical School, etc. With 251 engravings and 9 chromo lithographs. New York: D. Appleton & Co.

Anyone who is acquainted with the author of this work will understand its excellence. It is a thoroughly complete treatise on diseases of women, in which the most recent operations and improvements in treatment are ably described and illustrated. We have seldom had the pleasure of reviewing a treatise so readable. The chapter on fibroma of the uterus is, we think, one of the best In that part of the work devoted to "inquiries to the pelvic floor," the reader will get an amount of information, which will show the immense progress the specialties of medicine are making in the

cure of disease. We can only say this is one of the most complete and practical treatises on the subject yet to hand.

A TEXT-BOOK OF HUMAN PHYSIOLOGY, by Austin Flint, M.D., LL.D., Professor of Physiology and Physiological Anatomy in the Bellevue Hospital Medical College, etc., etc. Fourth edition, entirely rewritten with three hundred and sixteen figures and two plates.

This author upon physiology is now so well known that any criticism of his work appears useless. We do not altogether approve of the system employed in taking up the subject. We would have been better pleased with the book had more space been afforded to the description of physiological apparatus and the details of physiological experiment. The chapters devoted to the discussion of the nervous system are worthy of every commendation. They are complete, so far as our knowledge of to-day is, and clear elucidations of a very complex mechanism.

HAND-BOOK OF HISTORICAL AND GEOGRAPHICAL PHTHISIOLOGY, with special reference to the distribution of consumption in the United States. Compiled and arranged by Geo. A. Evans, M.D., Physician to the Atlantic Avenue and East Brooklyn Dispensaries, etc. New York: D. Appleton & Co.

This work deals, in a moral manner, with the subject of location of consumptives. It is a book which affords valuable information regarding the climatology of the United States, and one which can be profitably read by the physician and layman alike.

THE MODERN TREATMENT OF DISEASES OF LIVER, by Prof. Dujardin-Beaumetz, Member of the Academy of Medicine, Paris, etc., etc., translated from the Fifth French Edition by E. P. Hurd, M.A., Newburyport, Mass. Stiff paper; pp. 180, 25cts. Cloth 50cts. Detroit: Geo. H. Davis, 1888.

A very cheap and well printed little work, giving all the latest points on the diseases of that important organ, the liver. Should commend itself to those wishing such an edition. The translator has apparently done his work well.

THE MEDICAL NEWS VISITING LIST FOR 1889. Weekly, for 30 patients; Monthly, for 120 patients per month; Perpetual. Each in one pocket-size volume, containing 48 pages of indispensable data, with 5 illustrations, and 176 pages of classified blanks, ruled on fine writing paper. Flexible red leather, flap and pocket, pencil, rubber and catheter-scale, $1.25. Thumb-letter Index, 25 cents extra.

This work has been thoroughly revised and brought up to date in every respect. The text portion (48 pages) contains data indispensable in the daily work of the physician and surgeon, including the latest therapeutic novelties, their doses and effects.

THE CASE OF EMPEROR FREDERICK III. Full official report, by the German physicians and by Sir Morell Mackenzie. The German report translated by Henry Schweig, M.D., New York. This is the only edition giving the unabridged reports, with all of the illustrations, of Sir Morell Mackenzie and of the German physicians. Cloth, $1.25. Paper 75 cents. New York: EDGAR S. WERNER, 48 University Place.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF THE STATE OF MISSOURI at its Thirty-first Annual Meeting, held at Kansas City, Mo., April, 1888.

DISINFECTION AND DISINFECTANTS; their application and use in the prevention and treatment of disease; and in public and private sanitation; by the Committee on Disinfectants appointed by the American Public Health Association, 1888.

MISS PARLOA'S NEW COOK BOOK.—Boston: Estes & Lauriat.

An exellent work, by an author who knows what she is writing about.

Births, Marriages and Deaths.

Married, on the 6th Nov., R. M. Bateman, M.D., to Minnie E., eldest daughter of Brereton Bunting, Esq., J.P., both of Pickering.

At Zion, on Nov. 21st, Dr. James Bray of Toronto, to Mary S., youngest daughter of John Treemer, Taunton, Ont.

At Toronto, Nov. 21st, E. Bromley, B.A., M.D., to Miss Elardge, both of Beeton, Ont.

At Brockville, Ont., Oct. 27, Dr. J. G. W. Pickup, aged 50 years.

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ANEURISM OF THE THORACIC AORTA.*

BY A. MCPHEDRAN, M.B.,

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GENTLEMEN,—Before entering on the discussion of this case of aneurism which I bring before you to-day, let us dwell for a little on the causes of aneurism other than traumatic cases. Preceding the development of aneurism there is weakening and loss of elasticity of the wall of the artery; to this there are very few, if any, exceptions, as a healthy artery will probably resist successfully the highest blood pressure that can be brought to bear on it. The weakening of the arterial wall is usually due to atheroma; other occasional causes are simple inflammatory softening from trauma, or rheumatism, calcifications, and fatty degeneration. Disease of the artery occurs as a senile change, but may be produced at early age by syphilis, gout, Bright's disease, chronic alcoholism, lead poisoning, etc. In the ordinary course of events, in late middle life, the arteries, at least the larger ones, begin to suffer from senile change before the heart shows any signs of failure. This may be called the "aneurismal age," as the weakened arteries are apt to give way before the pressure of the blood forced into them by the still vigorous heart. Aneurism is therefore most frequently met with in persons from 40 to 50 years of age; they are very rare before 30, because the walls of the arteries are yet seldom diseased; and they are rarer still after 60, because, though the arteries may be much weakened by senile changes, not only has the heart lost much of its vigor from the same cause, but the volume of blood in the body is now so much diminished that it would be scarcely possible to raise the arterial tension sufficiently to cause aneurismal dilatation even of the weakened arteries.

From what has been said you will see that while disease of the arterial walls is the predisposing cause of aneurism, the active agent in their production is increased blood pressure. The wall of the artery may become so weak that even the extra pressure induced by coughing may be sufficient to cause it to give way. Hence it will be readily seen how occupation has an important bearing on the production of aneurism. Those people who are engaged in heavy labor, and therefore subject to great strain, are most liable to aneurism. But straining not only tends to cause the weakened arterial wall to give way, but, by causing repeated over-distension, will lead to degeneration of the vessel wall, and thus prepare the way for its aneurismal dilatation.

The clinical history and symptomatology of aneurism of the aorta is well illustrated by the patient before you. The disease may begin with a sudden onset of symptoms, or by a gradual failure of health; this case is one of the first and more usual class. The following extract is from the history taken by Mr. H. Grundy:

Edward A., aged 49, Irish, good family history. His own history good except some rheumatism in 1866 and 1872; had gonorrhœa many years ago; served as a cavalry soldier for 20 years; took also much gymnastic exercise. Last July, while lifting some heavy timber, he felt a sharp, shooting pain in right chest, in which some pain has continued ever since, with exacerbations, and often shoots through the chest and into the shoulder; also a peculiar metallic cough, increased by exercise; little or no expectoration. His breath is short and the respiratory murmur is weak all over right lung—normal over left. His chest is well developed and shows some bulging over right 2nd and 3rd costal cartilages, which, however, was probably produced during boyhood, or while a soldier. In the region of this bulging, pulsation is to be seen extending three inches to the right of sternum. Over this area there is absence of respiratory sounds; no murmur, but great accentuation of 2nd sound of the heart; using a solid stethoscope there is well marked systolic and slight diastolic shock felt by the ear. There is dullness and increased resistance

* Abstract of a Clinical Lecture delivered at the Toronto General Hospital, Dec. 17th, 1888.

on percussion over this area except around the margin. Pulsation is felt to be uniform all over this area; it is synchronous with, and stronger than that felt at the apex of the heart; there is no thrill. Pressure over this area causes cough and pain, as does also lying on the back or left side. The apex beat of the heart is weak and displaced nearly an inch downwards; the sounds are normal; the radial pulses are weak, the left being considerably weaker than the right. The superficial veins over the upper part of the chest are slightly dilated. The pupil of the right eye is considerably larger than the left; it reacts slowly to light, but very well to accommodation.

Now let us consider the important points in this history seriatim and endeavor to ascertain the cause and interpret the significance of each. In his previous history there are three things to be noted, viz.: his occupation and mode of life, his having had rheumatism and also gonorrhœa. In discussing the etiology of aneurism, we said that *straining* was one of the most important causes of atheromatous degeneration of arteries and *the* cause, in most cases, of the aneurismal dilatation of the vessel. This man's life as a soldier, was one subject to repeated and severe exertion and that too under the additional strain of tightly fitting dress and accoutrements, conditions that have been adduced to account for deaths from aneurism being about ten times as frequent among soldiers as among civilians. The sudden onset of pain in the chest and other symptoms, leave no room for doubt that the strain of lifting caused the weakened wall of the aorta to give way, so that the case illustrates in the clearest manner the efficacy of straining in causing first the degeneration of the walls of the aorta, and secondly, the formation of the aneurism. The rheumatism may have helped on the atheromatous change in the wall of the artery. That he had gonorrhœa has some possible connection, in that he may also have had syphilis, although he never showed any evidence of it.

Of the symptoms of aneurism, *pain* is one of the earliest and most troublesome. It is caused by stretching of the nerve fibres in the arterial wall and by pressure of the tumor on neighboring organs. There is usually, as in this case, a fixed pain with exacerbations in which there are sharp darting pains in various directions; the pain is often affected by change of position. Thus, variability in character and seat of the pain possesses great diagnostic significance and is due chiefly to change in blood-pressure, hence any excitement or exertion increases the shooting neuralgic pain. If the tumor cause erosion of the vertebræ or sternum, gnawing pain results. The pain is more persistent than that of angina pectoris, and causes much less anxiety.

The cough, dyspnœa and feebleness of respiratory murmurs in right lung are all probably due to one cause, viz.: narrowing of the right bronchus by pressure of the tumor. The irritation of the bronchus will cause some collection of mucus at the narrowest part, which in turn will excite the cough. The somewhat metallic sound of the cough suggests some spasm of the glottis as a cause; if there is spasm it must be slight and only occasional, as the voice is natural and the laryngoscopic mirror shows a normal condition of the vocal cords. When spasm of the glottis exists it is caused by irritation of the vagus or recurrent laryngeal nerve by pressure of the tumor. When the pressure on the recurrent laryngeal increases so as to destroy it, then paralysis of the corresponding vocal cord results, and is easily demonstrated by the throat mirror. If both cords are paralyzed, voice is completely lost and dyspnœa very great; this is rare. These respiratory symptoms are paroxysmal, on account of the varying degree of distension of the tumor. Anything increasing the arterial tension distends the tumor, thus suddenly lessening the calibre of the bronchus or increasing the irrritation of the nerve.

The dilatation of the right pupil is caused by irritation of the cervical sympathetic, through pressure on the nerve filaments, which pass from the anterior roots of the spinal nerves in the cilio-spinal region—the lower cervical and upper dorsal—to the cervical ganglia of the sympathetic, thence up to supply the dilator muscles of the iris. Pressure sufficient to irritate these nerves causes dilatation of the pupil, as in this case before you; if the nerves are paralyzed by the pressure then the pupil contracts, as the sphincter muscle of the iris is unapposed. The condition of the pupil usually varies much from day to day; yes, even from hour to hour, as it depends on the degree of distension of the aneurism by the blood-pressure. This fact possesses much significance in distinguishing an-

eurism from a solid thoracic tumor. These pupil and larynx symptoms are sometimes the first symptoms of thoracic aneurism.

Let us now examine the pulsation. It appears to be heaving. Were the second rib out of the way, it is probable the pulsation would be felt to be distinctly expansile, judging from what we feel in the intercostal spaces. It is synchronous with, and considerably stronger than the apex beat of the heart. This is a point strongly dwelt on by Balfour, as the impulse of a solid tumor is seldom as forcible as that of the heart, and never much more forcible. This is true also of an aneurism containing much fibrin. The impulse of aneurism is best brought out by placing one hand over it and the other on the back, and noting the pulsation after complete expiration. There is no thrill in this case, but then thrill is rare in sacculated aneurism.

There is no bruit in this aneurism, but bruit is not a constant symptom in sacculated aneurisms; on the contrary, it is probably absent in one-half the cases. I wish to impress this on you, lest you attach too much importance to it, as is too often done. Note particularly the heart-sounds as heard over the tumor: both are distinct, the aortic being highly accentuated. This is probably quite as distinctive of aneurism as bruit. Note also that a solid tumor, pressing on the aorta sufficiently to cause such distinct pulsation, would almost certainly cause a murmur. I think it certainly would, and no murmur is heard here either over the tumor or along the great vessels. Note next the systolic and diastolic shocks felt on auscultating with a solid stethoscope, such as this. The diastolic shock accompanies the clear ringing second sound. This second shock is most significant of aneurism, and is, when preceded by a systolic shock, probably pathognomonic.

Of all these symptoms, the following point directly to aneurism, viz.: the character of radial pulses, the rhythmic expansile, strong pulsations, the systolic and diastolic shock signs and the accentuated aortic second sound heard all over tumor; one sign, bruit, is absent. Any one of these signs might possibly be produced by any tumor, but the presence of so many of them renders the diagnosis of aneurism positive. The other symptoms, viz.: the pain, dilated pupil, dyspnœa, cough, weak respiratory murmur in right lung, dilated veins, etc., are pressure signs, and might be produced by any tumor. If the condition grows worse, several other symptoms may be added, as dysphagia from pressure on the œsophagus; œdema, local or general, over the region drained by the superior vena cava, change or loss of voice, whiffing respiration, etc. We will not dwell on the differential diagnosis, but only mention the chief diseases liable to be mistaken for aneurism; solid tumors have already been referred to; abscess and localized empyema; aortic valvular insufficiency, especially if the apex of the lung is indurated and retracted, uncovering the aorta; dilated heart, and pericardial effusion.

The prognosis is, of course, not favorable. The treatment we are pursuing consists of as perfect rest as possible, rising not being allowed on any account; limiting the liquid consumed in 24 hours to about 10 ounces, and solids to 12 or 15 ounces. The bowels to be kept open, so that there be no straining when the bed-pan is used. If there is much pain we will try an ice-bag over the pulsating region, having it suspended so that it will only lightly touch the surface, that the pressure may not become irksome. If that is not sufficient then opiates will be given at night as needed. We hope, however, that quieting of the circulation by rest and low diet will so relieve the tension in aneurism that the pain will not be troublesome. For medicines, we are giving iodide of potassium. He is taking 20 grains daily at present; this will be gradually increased to ʒj. daily. How the iodide acts is not known, but great benefit is claimed for it by many good observers. Should all these means fail to give any relief, after a trial of a few weeks, it will be in order then to discuss the practicability of securing the deposit of fibrin in the interior of the sac, by passing a few feet of fine wire into it through a fine canula. Neither this nor any other operative means offer much hope of success, but the pros and cons can be discussed, and if thought advisable laid before him for him to choose.

TREATMENT OF EMPYEMA.*

BY T. K. HOLMES, M.D., CHATHAM, ONT.

The object of this paper is to present a tabular view of twenty-two cases of empyema treated in general practice. The cases are too few to base an absolute mode of treatment upon, but they are quite varied in character and may elicit the opinions of others, and so aid in the management of a treatment of disease both common and dangerous.

*Read before the Ont. Medical Association, June, 1888.

Tabular View of Twenty-two Cases of Empyema Treated in General Practice.

No.	Name.	Age.	Duration.	Leading Features.	Treatment.	Results.
1	S. Z.	22 Yrs.	4 Weeks.	Right localized. (Mulatto.)	Incision, free drainage, Aug. 2, 1868	Died of phthisis six months after.
2	J. B.	4 "	3 "	Right general	Spontaneous opening in 6th space in line of axilla. June 4, 1869	Recovered in four weeks. Not washed out.
3	P. L.	42 "	8 "	Left general. Pus offensive	Spontaneous opening in 6th space in line of axilla, Mar 4, 1870	Recovered in ten weeks. Not washed out.
4	J. A.	18 "	5 "	Right localized	Spontaneous rupture into bronchus, Nov. 18, 1871. Several attempts to reach pus with needle failed.	Died suddenly at time of rupture.
5	N. A.	17 "	12 "	Right localized	Spontaneous rupture into bronchus. Subsequent fruitless attempt to reach pus with aspirator.	Died of phthisis.
6	D. K.	44 "	2 "	Right localized	Incision and escape of 4 oz. of putrid pus on the 30th March, 1879.	Died April 10; 1879, from injuries by falling tree which had fractured skull and ribs and thus caused the empyema.
	Mrs W.	22 "	10 "	Right general.	Trocar and drainage tube, 48 oz. offensive pus discharged on Sept. 19, 1878. Washed out with carbolic acid. Tube inserted below angle of scapula about two inches.	Cured in three months. This case came on a few days after confinement.
	Mrs. J.	69 "	9 "	Right general	Trocar and tube, July 10, 1881. Pus offensive. Washed out with carbolic acid, one per cent., every four hours	Perfect recovery in eight weeks.
9	T. McK.	11 "	6 "	Right general.	Trocar and tube Mar 24, 1880, pus large in quantity and offensive. Carbolic acid, one per cent.	Recovery complete in eight weeks.
10	Mrs. M.	20 "	4 "	Right localized	Trocar and tube, Jan. 11, 1885. One pint of pus escaped from 7th intercostal space behind.	Patient had phthisis and died a month after without having been made any better by the operation.
11	W. H	26 "	2 "	Left general	Trocar and tube two inches below angle of scapula, on Dec. 3, 1883. Two pints putrid pus. Washed out with carbolic acid, 1—128.	Rapid and perfect recovery. Well in five weeks.
12	Mrs. W.	31 "	3 Days.	Left general	Aspirated 20 oz. pus, Oct. 16, 1884. She was confined some days before aspiration and was pretty well on the 13th.	Died same night, *i.e*, Oct. 16.
13	P. H.	38 "	3 Weeks.	Right local	Spontaneous rupture into bronchus, May 7, 1883. Pus very offensive but not large in quantity.	Recovered in six months.
14	W. H.	32 "	3 "	Left local	Spontaneous rupture into bronchus, May 1, 1883.	Recovered in nine months. Hectic fever every day for three months. Pus offensive.
15	J. C.	27 "	9 "	Right general.	Spontaneous rupture into bronchus, Sept. 2, 1881. Rapid failing, great emaciation till Sept. 30th, when I put in rubber tube 3 inches below angle of scapula and let out large quantity of putrid pus.	Immediate improvement followed operation and recovery complete in three months. Washed out. Has borne two children since and seems perfectly well now.
16	S. W.	6 "	2 "	Left localized	Trocar and tube, April 13, 1886, 8 oz. sweet pus.	Fever continued high and he died in two weeks. No benefit from operation. He belonged to a family most of whom had died of phthisis.
17	R. G.	8 "	3 "	Left general	Trocar and tube, May 29 1886, 16 oz. sweet pus.	Recovery in three weeks. Not washed out. Pus never became offensive. Tube removed in sixteen days.
18	T. S.	24 "	2 "	Left localized. Patient broken down by dissipation.	Trocar and tube, May 16, 1886.	Improved very fast for a week when he died suddenly with symptoms of pulmonary embolism.
19	T. F.	4 "	8 "	Right general. Pus pointed two inches below angle of scapula	Incision and tube, Aug. 4, 1886, a pint of sweet pus	Rapid recovery. Tube removed permanently in two weeks
20	E. S.	3 "	6 "	Left general. Temp normal at time of operation and for several days before.	Trocar and tube, July 23, 1887, pus 20 oz. and sweet. Not washed out.	Tube removed in seven days and recovery perfect then. Pus remained sweet.
	S. B.	10 "	3 "	Right general	Trocar and tube, Feb. 27, 1888, about 24 oz. sweet pus. Not washed out.	Tube removed on fourteenth day and not replaced. Recovery perfect.
		21 "	4 "	Left general	Aspirated Mar. 25, 1885, and two quarts of clear serum removed. Aspirated again April 15, and three pints of pus removed. Drainage tube put in May 7, 1885, and the cavity is still discharging. Patient refuses further treatment.	I was consulted Sept. 2, 1885, and have seen patient once since, but could not persuade him to undergo resection of ribs.

Mr. Godlee has called attention to the frequency with which physicians overlook the nature of empyema, and as several of the cases here reported were for some time unrecognized by those in attendance, it is fair to conclude that they sometimes present symptoms of a puzzling character. Care however, even in obscure cases, will seldom fail to reveal the true character of the disease.

The experience afforded by these twenty-two cases has convinced me of the following:

1st. The importance of an early recognition of the case. 2nd. The necessity of giving free and constant exit to the pus. 3rd. That when pus has discharged through the bronchi with no amelioration of symptoms, an external opening may be followed by the best results as in case XV. 4th. That the most unpromising cases are those occurring in the puerperal state, and those in phthisical subjects. 5th. That resection of the ribs is not necessary as often as some modern writers affirm. 6th. That the entrance of unpolluted air into the pus cavity does not prevent cases from doing well. 7th. That while washing out the cavity has not, in my experience, been accompanied by any accident or any bad result. it is unnecessary, when the pus is healthy, to do so.

Of the twenty cases, eight died: 4 of phthisis, 1 from traumatism, 1 from embolism, 1 from asphyxia, and 1 from pyæmia. Of the fourteen recoveries all were complete, except one in which a fistula remains.

The percentage of fatal cases is large in this series but an analysis shows that only one of the fatal cases could reasonably have been expected to recover. This was case IV, the patient dying very suddenly from escape of pus into the lung: although attempts were made to withdraw some of the fluid by means of a long needle attached to a syringe. I regret these efforts were abandoned for the time, because it is quite likely that a free external discharge even as late in the course of the disease as when I saw him would have averted death.

Leaving out this case and the four that had phthisis, there remain three deaths to account for. These are cases VI, XII, and XVIII. Case VI was a man who was injured by a falling tree, having a severe fracture of the skull, a broken clavicle, broken sternum and several broken ribs, and his condition was so serious that it is almost certain he would have died even had empyema not supervened.

Case XII was pyæmic in character, and ran such a rapidly fatal course as to convince both the attending physician and myself that such cases never get well. She was confined of her second child on Oct. 13th. The labor was normal and no symptom excited alarm until the evening of the 15th, when a chill occurred, followed by fever and accelerated breathing. On the morning of the 16th her attending physician detected an effusion in the left pleural cavity, and on using an aspirator the same evening with the hope of relieving the urgent dyspnœa, the fluid was found to be pus of a light colored, unhealthy appearance. She died the same night.

Case XVIII made such rapid improvement for a week after paracentesis, as to warrant the strongest hope of complete recovery, but at the end of that time he suddenly became breathless and cyanosed and died almost immediately. A post mortem could not be obtained but, the symptoms preceding death exactly resembled those of pulmonary embolism. Some of the cases that recovered presented features of sufficient interest to merit a reference. Case VIII was believed by the first physician who attended her to be one of pneumonia, and she was subsequently treated for four weeks by a second physician as suffering from typhoid fever. Although sixty-nine years of age and greatly exhausted by nine weeks illness, her recovery was prompt and complete after paracentesis. The first physician's diagnosis may have been correct, as empyema sometimes complicates or succeeds pneumonia.

Case XI occurred in a strong young Englishman on whom I had operated for stricture of the urethra by divulsion. The stretching of the stricture was followed in four days by pyæmia, a number of abscesses formed in different parts of the body, and pus accumulated in the pleural cavity at the same time. Notwithstanding such a dangerous condition he made a good recovery.

Case XV illustrates the advantage of paracentesis in certain cases of spontaneous discharge through the bronchial tubes without relief. She had been ill nine weeks when I first saw her and pus had been freely expectorated four weeks, with constant loss of flesh and strength. The emaciation was extreme, and there were hectic

fever and profuse sweating. It had been considered acute tuberculosis, and the pus was thought to come from a cavity in the lung. It is probable that the rupture into the bronchial tubes occurred near the upper part of the lung, and that the pus cavity had been unable to empty itself, for on introducing a large drainage tube in the eighth intercostal space below the angle of the scapula, a large quantity of thick putrid pus came away, and from this time improvement was uninterrupted and recovery was complete in three months. She has borne two children since and is now in perfect health.

Cases XVII, XX and XXI are instructive, as showing how quickly children generally get well after paracentesis, even when the disease has lasted many weeks. In none of them was the cavity washed out, nor did the pus become offensive, although air entered freely.

Case XXII is the only one I have met with in which pus collected after the aspiration of serum. He was taken sick on the 15th, aspirated on the 25th of the same month and two quarts of serum drawn off. On April 15th three pints of pus were removed by aspirator, and on May 7th a drainage tube was put in. This was in 1885, and it has been discharging ever since. I first saw him on the 2nd of September 1885, and again several months afterwards, but he refused to submit to resection of the ribs and continues to put up with the unclosed cavity.

It is imposible to over-estimate the importance of strict antisepsis in the performance of aspiration of the serous effusion from pleurisy. The instrument should be not only clean and aseptic, but the skin where the puncture is made should be well washed with sublimate solution.

In adults, all will agree that free drainage should be secured until the cavity is closed, the only question being the manner of doing this. Without reviewing the relative merits of free incision, resection of one or more ribs, or a double opening, I would only say that in practice I have generally made a single opening with a large trocar, and have introduced a drainage tube through the canula, which is then withdrawn, leaving the rubber tube in the wound and securing it there by a thread passed transversely through it, and kept in close contact with the skin by strips of adhesive plaster. I have not seen a case where I thought a double opening was necessary, or would have given a better result, and unless a clear indication for making it be present, I think it better and safer to make only one. The admission of air into the cavity may have disadvantages, although I am not convinced that it has. On the other hand, its presence there prevents the too rapid expansion of the lung, and the injury that might result from the sudden rupture of adhesions.

Should the suppurating cavity be washed out? This is a question of some importance, and the answer must depend upon the circumstances in individual cases. There is undoubtedly some risk in washing out, for cases of sudden death, the result of injecting fluid into the cavity, have been reported. The fatal result does not depend upon the kind of fluid used, for the use of pure water has caused death. The explanation of this is not easy, but it may be that the untoward event is due to inhibition of the heart through reflex action, caused by the presence of the suddenly injected fluid. When the pus is healthy washing out is unnecessary, and if the patient's condition be good, as indicated by the temperature, pulse, etc., even though the pus be not healthy, I believe it advisable not to irrigate. If, however, free drainage be maintained without amelioration of symptoms, and the pus be offensive, I believe the use of a disinfectant wash necessary; and if it be of the temperature of the body and injected very slowly the risk will be very slight. The quantity injected will vary with the size of the cavity.

Aspiration will sometimes cure empyema in children, but in consideration of its frequent failure and the risk that such delay implies, it is doubtful if it would not be better practice in most cases to perform paracentesis instead, especially as anæsthesia is required for either. I believe it would. Dr. Wilks has reported five deaths in children, occurring in one of the London hospitals during a single year, from bursting of pus into the lung, and he advises tapping and free drainage if one aspiration fail.

CLINIC, BY JOSEPH E. WINTERS, M.D.*

Professor of Diseases of Children at the Medical Department of the University of New York and Post Graduate School, etc.

GENTLEMEN,—I present to you first this morning a child twelve years old with swelling on the left side of the neck. She is one of five children;

* Delivered at the Medical Department of University of New York on Nov. 1st, 1888.

none of the rest of her family were so affected. It was first noticed by the mother five weeks ago, and since that time it has already increased in size; you can all see it distinctly. The upper border of the tumor is on a level with the inferior border of the thyroid cartilage, and it extends below the clavicle; covering it completely, so that the swelling extends one to one and a half inches below the clavicle; it is superficial and extends considerably to the right of the median line, is very firm and even hard, almost as hard as bone. It is not painful as can be seen from observing the expression of the girl's face. It is difficult to tell the depth, but it seems to have a deep attachment, is absolutely immovable and as fixed as the clavicle itself. I first saw the case one week ago last Tuesday, and since that time the tumor has already increased in all directions and is fully one-third larger than when I first saw it. It seemed softer last Tuesday, but this was probably due to the action of a 5 per cent. solution of the oleate of mercury, applied twice a day, which caused some cellular inflammation and œdema, and when discontinued it became hard again.

The question is, does it extend into the neck behind the clavicle. From the fact that it has produced no pressure symptoms in that direction. I should say not. The appetite is good, bowels regular, and child sleeps well. You notice that the mother before you has a rachitic deformity of the spine, but this has nothing to do with the case of the child. The question is as to the diagnosis.

It is not goitre, because it is not in the median line and is much harder than ordinary goitre; it is not a tumor connected with the lymphatic glands, because others are not affected; not an acute adenitis, because there would have been symptoms of suppuration by this time; not a cellulitis, because there is no pus, and no elevation of temperature. In my opinion it is a neoplastic growth, probably sarcoma or lympho-sarcoma, because of its coming on rapidly, causing no pain and being deeply seated. Such growths are not so infrequent as is generally supposed, and their tendency is to spread downwards into the chest beneath the clavicle, until, by their constitutional or pressure effects they cause death. Now the question is, what would you do with it? The only thing to do is to have it removed by a surgeon, after having watched the case so as to be sure of your diagnosis. I remember having seen numerous cases at Demilt Dispensary during the last four or five years involving the thoracic cavity and aorta, and ending fatally.

Case II.—Here is a little girl well until yesterday, then she suffered from restlessness; no vomiting, temperature 105°, pulse 103. On observing the child the first point that attracts your attention is the cough; secondly, the rapid panting, breathing 55 per minute; yesterday afternoon the respirations were 65. The cough is short, quick, and loose, giving evidence of little mucus in the tubes. The normal ratio of the pulse to the respiration is three and a-half to one, and the perversion of this ratio is enough to suggest pneumonic inflammation, and then you begin your physical examination.

Inspection shows panting respiration, and exaggerated breathing on left side.

Palpation is negative.

Percussion gives slight dullness in infra-scapular region on right side.

Auscultation.—Small crackling râles with inspiration and expiration, are heard over the posterior portion of right lung. No vesicular murmur is heard; on the left side you hear exaggerated breathing. In a child of this age, the respiration is almost entirely diaphragmatic, and when the lung is inflamed there is scarcely any movement of the thoracic walls; but by placing my hand over the pit of the stomach and pressing upwards and backwards, I interfere with the action of the diaphragm, therefore thoracic breathing takes place. Now, in addition to the numerous friction râles, distinct bronchial breathing is heard, therefore always, in examining a child, first examine while breathing naturally, then place the hand over the diaphragm and all the sounds are increased. This is a point which you should always bear in mind, and if this method is adopted, you will never mistake pneumonia for pleurisy. Yesterday, on examining this child, no sound except feeble respiration could be obtained; but on pressing over the diaphragm, showers and showers of friction and crepitant râles could be obtained, and bronchial breathing. In front, no physical signs can be obtained. The diagnosis is lobar pneumonia, because it involves a large extent of lung and on account of the suddenness of its onset. Now, unless you realize that you

can have such an extensive inflammation of the lungs, with few symptoms, you will often overlook pneumonia. This is one of the peculiarities of lobar pneumonia of children, viz., that the symptoms are not at all in accordance with the extent of the lung involved. In children, larger portions of the lungs are affected than in adults; double pneumonia is not uncommon, and apical pneumonia is very frequent up to the fourth year, is not nearly so serious as the apical pneumonia of adults, and has none of the symptoms of nervous prostration that occur in adults. The pneumonic inflammation extends rapidly in children, and in a few hours a diagnosis can be made. This child was taken sick yesterday morning, and in the afternoon the diagnosis was made. This rapidity was well illustrated in a child which I once saw at nine o'clock in the morning, who was then in convulsions. I examined the chest carefully, but nothing abnormal was discovered. I was again called to see the case at twelve o'clock, and on examining the chest, all the signs of pneumonia were present. So that all the physical signs can be obtained in a few hours after invasion. Pneumonic inflammation is more severe, and thus the formation of abscess and gangrene is much more common in children than in adults. The reason why abscess does not take place in every case of pneumonia, is, that pneumonia affects the pulmonary vessels, and when the bronchial vessels are involved, abscess results.

Resolution takes place much earlier in children than adults, often on the fourth or fifth day, and the child may be well in a week.

Treatment.—It is so simple, that almost nothing is required. First protect the surface by an oil-silk and flannel jacket; it is better than a poultice, because of want of care on the part of the attendants. If you have a trained nurse, you may use poultices; a cold poultice does more harm than good. The child should have a warm, moist temperature, 70° to 75°; if you do these two things, as a rule you will not require any medicine. If the child has a respiration over fifty, it is not so serious a symptom as ordinarily considered; it may be due to nervous phenomena; as I have seen a case where it was over ninety-six for four days, and a good recovery ensued. Another common cause of rapid respiration is constipation, and when the bowels are moved by one-tenth grain of calomel, given every half hour, the respirations often fall to thirty-five.

Liquid diet should be given, and no other treatment is required in this case. Yesterday afternoon, when the temperature was 105°, potassium citrate and spts. etheris nitrosi were given. If in a few days from now you hear nothing but large mucous râles, have evidences of heart failure, as cyanosis, and weak pulse, and of respiratory failure as the air does not penetrate the lungs beyond the large bronchi; and on pressing over the pit of the stomach all the physical signs return, you will be able to distinguish between resolution and incipient pulmonary œdema. Now is the time for treatment, and stimulants must be given, not only to the heart, but also to the respiration. This is best done by the application of a weak mustard paste for twenty minutes over the chest, followed by sweet oil; such applications can often be made three times in twenty-four hours.

Temperature this morning is 100°, pulse 138; prognosis in all cases is good; child may have alarming symptoms, and yet recover. There has never been a death from lobar pneumonia of a child, seen at this clinic

Correspondence.

OUR NEW YORK LETTER.

From our own Correspondent

NEW YORK, Dec. 17th.

The *Medical Record* published a very interesting paragraph by McKee from the Cleveland *Med. Gazette*, on "Do contracted pelves have an influence on the sex of the child." This is a question of considerable interest, and has been given some attention. Olshausen, of Berlin, in a series of five hundred and twenty-one deliveries of women having contracted pelves, found two hundred and eleven girls and three hundred and ten boys, *i.e.*, one hundred to one hundred and forty-seven. Allfeld arrived at much the same result, viz: one hundred and thirty-three boys to one hundred girls. Dohrn (Zeitschrift für Gebürtshuffe Gynoekologie, xiv, 1 p. 80) has made the last thorough experiments on the subject in the obstetrical clinic of Konigsberg. He collected statistics of four hundred and fifty deliveries in women who had narrow pelves, two hundred and twenty-four were girls, and two hun-

dred and twenty-six were boys—one hundred to one hundred and six-tenths. The other deliveries in this clinic were in the proportion of one hundred to one hundred and one and six-tenths. Dohon is of the opinion that a narrow pelvis has no influence on the sex of a child.

At the State Emigration Hospital, N.Y., there are treated each year about one hundred cases of erysipelas, the majority of which are facial erysipelas. These cases are treated in a building set apart from the general hospital, fitted up in rooms which contain beds, from five to ten in a room. The case is put to bed and is kept there until all signs of the disease has disappeared. The treatment that is usually thought to be the best is to cover the surface with vaseline, then a thick layer of cotton batting is placed over the part, that is covered with vaseline, then a good snug bandage is applied. If the face is the part that is involved, holes for the eyes, nose and mouth are cut in the cotton, making a complete mask. If the limb is the site of the inflammation, the bandage should be applied with great care and the cotton batting should be thick and even, so that pressure will be even and uniform. This dressing is renewed once in twenty-four hours, and the parts well covered with vaseline again. The bowels are kept free, but not purged. The temperature can be controlled by antipyrine or antiefbrine. The hair is kept short in cases where the scalp is involved, and if pus forms under the scalp, it is let out; where the eyes are closed from œdema of the lids, the lids are separated with care and cleansed once a day, and if there is much secretion this cleansing process should be repeated oftener. It is done without removing the whole mask, by having the flap of the mask over the upper eyelid so that it can be turned back, without disturbing the rest of the mask. Stimulation is given where the patient is weak. Good diet is administered in spite of the tempera- t e. It is found best not to put the case on low c t. Purgation or depletion are also contra-indi- c d. Under this treatment all the cases get well, a d in the number treated in the last five years at t s hospital there have been only three deaths. (n of these was within the last year, and was a case c acial erysipelas when she came in, but it started in t throat. The woman was about to be confined; t inflammation gradually extended over the body a when it had covered the abdomen, she gave birth to a boy. Every precaution was taken to prevent the vulva and vagina from becoming involved, but it was useless.

This was one of the worst cases that has ever been seen here, death taking place thirteen days after her child was born. The infant had erysipelas and died fourteen days after birth. Other remedies have been tried, but none seem so satisfactory as the one I have just described. The simplest treatment seems to be the most satisfactory. Trousseau said, "When a patient suffering from erysipelas is placed under my care, my rule is to abstain from every kind of treatment" and he adds that such had been his plan for twenty-eight years, and he does not remember losing more than three persons from erysipelas in that time. He insisted on the importance of keeping patients in bed, both in the acute stage and during convalescence, to prevent their catching cold and suffering relapse. The treatment of phlegmonous erysipelas consists in opening up the abscesses, washing them out with solution of bichloride, 1-1000, being sure to break down all the dead connective tissue. The cavity is thoroughly cleaned out and drainage tubes are put in, so that the wound can be drained completely. When there is danger of a tendon sloughing, it is laid bare and kept well covered with bicloride gauze. A very large number of phlegmonous erysipelas cases that come into the Emigrant Hospital during the winter. They are classed as cellulitis and counted as such. Most of these cases need a great deal of stimulation and good nutritious diet. When they are operated upon early they get well without any lost tendon. If they come into the hospital after pus has formed around the tendon there is in most cases a loss of tendon. Yours,

AJAX.

Selected Articles.

THE INFANT FOOD PROBLEM.

To the general practitioner everywhere, there comes constantly the question: What means shall be employed to prevent the terrible mortality among infants deprived of their natural food, the mother's breast-milk. As it is in very many instances impossible to place the child outside the walls of a large city, this want of proper hygienic surroundings acts as one great factor in the production of disease. But perhaps the most active

cause of disease is the exhaustion of the vital powers from the want of those articles, which being properly and readily assimilated, aid to maintain the body in its highest and healthiest condition. We all know that, other things being equal, that child which has been able to keep its system in the best state, its blood rich and pure, its muscles plump and firm, is sure to pass through an epidemic of children's affections either entirely unscathed or suffering only from a slight attack, readily throwing off the disease and never being troubled with the sequelæ.

Defective nutrition, then, is the predominant factor in the causation of the fearful mortality everywhere observed among children. We need only point to the statistics of children's hospitals, foundling asylums, and similar institutions to show the truth of this proposition.

To us, as physicians and sanitarians, as citizens earnest for the welfare of this great republic, this comes with powerful import. An additional fact also appeals to us, when we learn that the vast majority of these are native-born offspring, while those who survive are largely the children of foreigners. This is shown by the valuable statistics of such investigators as W. Nathan Allen. Though we are compelled to admit that other causes, and one a very potent factor, produce the great disproportion between offspring of natives and foreigners, yet it must be admitted that the truth of our original proposition is still evident, that defective vitality causes a vast majority of deaths among infants, and even in children of larger growth. The latter fact is constantly shown by the great mortality which prevails, when by reason of short crops or other causes, the people are unable to procure the food needed to maintain their systems at par, and thus resist the inroads of disease.

It goes without saying that the infant should be raised on its mother's milk whenever possible. When, for any cause, this fails, then comes the question: What shall be the substitute? Abroad, the milk of asses and goats is in quite common use. Cows' milk being that most easily obtained, is most largely employed in this country. This being the fact, we next come to the consideration as to how the two kinds of milk differ and what is needed in order to cause that of the cow most nearly to appaoach that of the human being?

Cows' milk contains more proteid matter, more fat, more mineral matter and less sugar, and as a rule in health, human milk is alkaline, while cows' milk is often slightly acid. One special difficulty with cows' milk is that its acidity is more or less likely to form an insoluble mass by contact with the gastric juice, while the casein of human milk is in part a peptone and forms a very delicate coagulum when in contact with the gastric juice.

The object is always to produce a food for infants closely resembling in its composition mothers' milk, and the nearer this is reached in all its details, the more surely will such food prove wholesome and valuable to the infant.

Our idea of a standard infant food, when produced, would be as follows: Be sure to obtain the milk of a healthy cow. Just here we may premise that we do not believe in the common fallacy "one cow's milk." The mixture of the milk of several healthy cows is more likely to give an article of real value. Undoubtedly, many in this audience can substantiate the claim that it is most usually the pet cow, from which the milk is obtained which is put by for the sick baby; that receives all the banging, hurrying, and pelting, and as we all know, is thus likely to yield a milk which may actually be poisonous in its nature. The best combination would be pure milk diluted with sufficient pure water to reduce the relative proportion of albuminoids and mineral constituents most nearly to that of human milk, then partially peptonize or digest it, and finally, add a soluble carbo-hydrate with sufficient alkali to produce as close a resemblance to breast-milk as may be. We must not forget that peptonizing milk does not relieve us of the need of being sure that the milk is at the outset pure and fresh.

The milk supply of large cities has now become one of the great problems of the day. Churned in the cars to the city, then more thoroughly churned in the wagons over wretchedly paved streets, distributed in many cases from doubtful cans by persons of much more doubtful appearance as to their own cleanliness, the flavor often aided by the puffing of a cigar or filthy pipe on the part of the distributor, the article is received in many cases in a receptacle of equal doubt as to cleanliness, it is placed, perhaps, in a food chest, or so-called refrigerator, exposed to the atmospheric contact of other articles of food; is it to be wondered that the milk becomes of a very doubtful form as to its propriety as an infant aliment?

To a certain extent, these objections are met by the new plan of delivering what is called "whole milk." The milk, immediately after being drawn from the cow, is very carefully placed in glass jars. These being quite full are hermetically sealed so that there can be no opportunity of churning or adulteration or the absorption of odors or disease germs. For children who have passed the age of infancy, I have long been in the habit of urging the employment, particularly during hot weather, of what is called "evaporated milk." Its claims were that it was milk from healthy cows, well-fed, and being of a density greater than cream, churning or souring were less likely to occur during its transition to the city. Again, it was very much less ready to absorb or appropriate the odors, etc., to which it might be subjected. I have found this more easily borne by the child, and repeate[illegible]y I

have been compelled to substitute it for the "condensed milk," where a certain proportion of sugar is added in order to preserve the article.

For these reasons, Professor Vaughan urges the use of dried milk solids, that is, they can be transported without injury from any distance, and if properly prepared may be kept without putrefaction occurring. Now, if such pure milk from perfectly healthy cows was partially predigested by the process of peptonization with fresh pancreatine, the temperature then sufficiently raised to destroy the remaining ferment, reduced to a powder by evaporation, and to this, dextrine added, thus supplying the carbo-hydrate, we would then be as near the production of a proper food for infants as might be possible in the absence of the breast-milk.

By recent researches, we have been taught that dextrine is the best form of carbo-hydrate, as it is non-fermentable and does not irritate the stomach of the infant, is easily assimilated, and, unlike cane sugar or maltose, is not likely to take on acid fermentation. Roasted wheat flour has long been employed and recommended as an article of food for infants, and particularly where diarrhœa is present. The reason of this is because this process converts the starch of the flour into dextrine.

The malt sugar or "Liebig Foods" are, no doubt, often valuable, particularly in infantile constipation, for their laxative effects; but are extremely liable to continue a diarrhœa or increase it. When these are used for their laxative effect, it is safer to use them alone rather than with milk, lest their fermentative tendency be aggravated by the presence of too great a quantity of albuminoid matter.

I am incited to this remark by the remembrance that the Liebig Foods do not by themselves meet the requirements demanded for infantile nutrition, unless with the addition of cows' milk. By an examination of the analyses of such mixtures, we find that they add no essential to cows' milk; nor do these foods act chemically upon the casein, nor physically, by reason of their solubility; and, as I have before remarked, they may give rise to disorders of digestion, in consequence of the readiness with which they take on fermentation.

Farinaceous foods are, of course, out of the question, because of the absence of ptyalin in the secretion of the salivary glands in the earlier years of infancy. The addition of starchy matters to cows' milk, for the purpose of rendering the coagulum less dense and more easily broken up by the stomach, as has been recommended by some authorities, is wrong in principle; it really adds an indigestible element, which cannot fail to act as a foreign body, sure to produce fermentative acidity, diarrhœa and the usual train of evils.

The milk foods when diluted with water in accordance with directions, should correspond in nutritive value with human milk. Now that this correspondence should be more nearly perfect, they should also be partially predigested or peptonized, in order that the casein may be rendered more acceptable. It is also necessary that sugar in some form should be added.

In peptonizing milk, it is of the greatest importance that the pancreate extract which is employed should be pure and fresh. The odor of some digestive ferments as furnished by the stores, is such as to give rise to suspicion that they are already assuming the putrefactive tendency. In fact, it is a very difficult matter to preserve them, as it is well-known that the products of the pancreas are much more readily decomposed than any known animal substance. Hence the greatest care will be necessary so there shall not be the slightest possibility of the presence of putrefactive germs in any of these articles that may be employed to aid in the preparation of the diet of infants. The peptonizing of milk, although, apparently, a very simple matter as practised in the laboratory, yet is scarcely feasible in the household.

Another point is of great importance. Malt sugar is eminently prone to absorb moisture and hence it should not be combined with dried milk and then put in bottles or other form of package for family use, because as these packages are only partially used at one time, the balance is extremely liable to absorb moisture, resulting in fermentation; and this is more especially the case in hot weather or when kept in a hot room.

We cannot too strongly urge upon all who are compelled to prepare food for infants, the great, imperative necessity of using only water that has been boiled. To the medical man, the reason is plain, yet it would not be amiss for him to explain in each instance why this should be done. Just here it is equally important to see that the water is not cooled by the addition of ice, as we may thus return at once to the water the very organisms which the boiling was intended to expel. I am impelled to this remark by the remembrance of an inspection just made for the State Board of Health for Pennsylvania. The subject of complaint was the ponds from which the ice was obtained to supply the demands of a large town. These ponds were filled with water from a stream, really nothing but a drain for a full graveyard, one or more slaughter-houses, a large number of cesspools, which were in constant use, and a large area of swamp land.

In diluting any form of infant food, we should give positive definite quantities. Undoubtedly all of us have encountered many cases where the child was really starving, while apparently receiving a large quantity of fluid. The fact is that the dilution had been carried too far.

It is unnecessary for me to occupy your time with further points as to times for feeding or of necessity, for using bottles, etc., etc.

Before closing, I may remark, that in my investigation of foods for the preparation of a paper which may be read elsewhere, I received from my friend, Chief Medical Purveyor Baxter, of the United States Army, a tabulated analysis of some fifteen forms of foods. Of these, only four contained more than ten per cent of nutritive material, thus showing that even here we are likely to be deceived, and to be employing an article as useless for its proposed purpose as the too largely diluted food of the infant already mentioned.

In conclusion, permit me to say that it has long been my custom not only in my practice, but also in my teachings, to urge the giving of less medicine, using it only when imperatively demanded, and to insist upon the value of proper hygiene and proper nourishment, believing that these alone in many cases will at once place the child on the road to health, and, if persevered in, will, as a rule maintain it there.—William B. Atkinson, M.D., in *Sanitarian*.

SUDDEN HEART-FAILURE IN DIPHTHERIA.

Dr. J. Lewis Smith read at the first meeting of the Academy of Medicine in Nov., an admirable paper on "Sudden Heart-Failure in Diphtheria." Towards the close of his paper he examined by the light of clinical experience the prevailing theory that diptheritic paralysis results from anatomical changes, peripheral or central, or both, in the nervous system, and to inquire whether it was adequate to explain the paralysis as it ordinarily occurs—whether cardiac paralysis or the other forms. The following he gave as some of the objections to it:

1. Cases occur in which carefully conducted microscopic examinations reveal an apparently normal state of the nerves supplying the paralyzed part and of that part of the cerebro-spinal axis from which the nerves arise.

2. Palatal paralysis sometimes occurs as early as the second or third day of diphtheria, and loss of the tendon reflexes as early as the first day; and it seems improbable that a peripheral neuritis or anatomical changes in the cerebro-spinal axis such as to cause paralysis should occur at so early a date.

3. In its commencement diphtheritic paralysis often exhibits what Trousseau deisgnates as mutability; suddenly shifting from one group of muscles to another. It would seem impossible that there should be a sudden recovery from the paralysis, and then perhaps on the following day a recurrence of it, if it resulted from degenerative nerve changes, either central or peripheric. A persistent cause should produce a continuous effect.

4. Microscopists who have discovered degenerative changes in the peripheral nerves supplying paralyzed muscles, state that while some of the nerve fibres have undergone complete or nearly complete degeneration, others have been affected with only partial degeneration, and still others seem to be intact; a condition which would hardly account for the complete paralysis often met with, as, for instance, in the velum plati.

5. Diphtheritic paralysis, both motor and sensory, is frequently limited to the parts supplied by a single branch of a nerve, while all the other branches preserve their normal function. This fact, while not antagonistic to the theory that peripheral nerve lesions cause the paralysis, affords a strong, if not conclusive, argument against the theory that central nerve lesions are the cause.

In the discussion on the paper Dr. A. L. Loomis said that he had been accustomed to regard diphtheritic paralysis and heart-failure as not always dependent on the same cause. In the early stages of diphtheria it had seemed to him that heart-failure was due to the direct action of the poison, whatever that might be, as was no doubt the case in other diseases, especially typhus fever, in which sudden death not infrequently occurred from this cause. When the accident occurred in the advanced stages of diphtheria he had considered that it was caused by peripheral neuritis, although he did not deny that there was possibly not a sufficient basis for such an assumption. Dr. Beverley Robinson said that he was still of the opinion that cardiac failure in acute cases, in the majority of instances, was connected with the ante-mortem formation of clots in the heart, especially the right heart. When a hospital interne in Paris, he had made a large number of autopsies in such cases, and he had never found any lesions of the peripheric nerves. In his experience death did not always occur rapidly; the symptoms of heart-failure often continuing for a considerable time before the fatal termination. After death there would almost invariably be found fibrinous clots, and from their character he believed that they were formed ante-mortem, and were to a greater or less extent the cause of death.

Dr. A. Caillé spoke of the importance of keeping all patients suffering from diphtheria, strictly confined to bed, and of giving them sufficient stimulus, for the purpose of counteracting, as far as possible, the tendency to heart-failure. He also mentioned one case in which fatal heart-failure was apparently brought about by an error in diet.

Dr. Seibert expressed the opinion that heart-failure occurring in the early stages of diphtheria was due to the direct action of the poison of the disease upon the central nevous system, and that when it developed later on, it was due to pathological changes in the cardiac muscles. In all the

cases that he had known of, the attack was brought on by the attempt of the patient to make some exertion.

Dr. A. Jacobi said that it was probable that some of the sudden deaths in diphtheria were due to syncope, the result of anæmia of the brain brought about by exertion, as was sometimes the case in pnemonia. There was one peculiar condition that might be mistaken for heart-failure in the later stages of diphtheria, viz.: paralysis of the muscles of respiration. It usually followed the other forms of paralysis, and was characterized by shallow respiration, with a good deal of resulting dyspnœa and rapidity of the heart's action. In such cases electricity in short sittings, and strychnia by hypodermic injection, are the most efficient means of treatment. Being aware of the tendency to fatal heart-failure in diphtheria, it was the duty of the physician in every case of the disease to do all in his power to guard against such an accident. The indications are to save the strength of the patient by feeding and tonics, and especially to fortify the heart by means of alcohol and such agents as digitalis, sparteine and strophanthus. In every case of diphtheria we had to deal with sepsis, and alcohol was therefore of the highest possible value. He believed that no patient with this disease could be injured by alcohol, and that even the most courageous physicians often erred in not giving enough of it. If the choice were offered him between alcohol and all other remedies in diphtheria, Dr. Jacobi said he would unhesitatingly select the former as affording the best chance to the patient. In brief, then, the indications for the prevention of heart-failure are to save the strength, combat sepsis, and sustain the heart.

In closing the discussion Dr. Smith said that, since the stomach and lungs, as well as the heart, were implicated, the inference was that the cause of the trouble was some affection of the nerve supplying the three organs, the pneumogastric. It was a fact that a certain proportion of those attacked with heart-failure recovered, and that in some of those who died there was for a time an amelioration of the symptoms; and it seemed to him that this would not be possible if the trouble were due to heart-clot, which would undoubtedly be a permanent condition, unaffected by any treatment that might be adopted. It was also a fact t paralysis of some form almost invariably ceded the heart-failure, and this would seem indicate that the latter was due to the same se as the paralysis.—*Correspondence Jour. Am. A. Assoc.*

HE addition of a small amount of liq. ammon. mixture of the fluid extract of cascara sagrada, lers the color a bright ruby-red.

THE TREATMENT OF PERITONITIS.

The question how to treat peritonitis is one of the greatest importance, and upon the decision eventually reached will, in the future, depend the lives of many patients. Should the leaders of our profession decide that the administration of saline purges is the best treatment, and this be for a few years taught in the schools, the ordinary practitioner will soon acquiesce. If such a consummation is to be deplored, now is the time for us, who are of the contrary way of thinking, to protest.

To me it seems clear that before any conclusion can be reached, it must first be acknowledged that peritonitis, as ordinarily seen, diagnosticated, and treated by physicians, is so different from the lesion or disease which has been successfully dealt with by surgeons by the administration of saline purges, that it must be recognized that, from the standpoint of therapeutics, the two questions are as far apart as though they were two widely differing diseases.

As a therapeutic measure, no one disputes the wisdom, under some circumstances, of making an attempt to abort an inflammation; and yet it is equally well known that such an attempt, when made after the inflammation has progressed so far that to abort it has become impossible, must not only fail, but, equally certain, will be productive of positive harm. It is a common rule of treatment, and one that holds good in the great majority of instances, that an irritated, sore, or inflamed part is to be put as nearly as possible at rest, and that whatever increases the pain suffered is likely to be injurious. Why shall we make an exception to this rule in all cases of peritonitis by giving salines, which throw the bowels into a state of great activity, and increase the pain, at the same time denying the patient opium, which equally certainly relieves?

I have been, and am an advocate of the use of opium in all cases of peritonitis as seen by physicians, but at the same time I have never denied my patients the use of laxative medicine, and it is, I am sure, by the judicious administration, according to the special needs of each particular case, of the two seemingly diametrically opposed drugs that the best results will be attained. The reason, probably, that the use of opium in the disease is being decried is that it has been abused. It should not be given to the point of narcosis, nor should it be expected that in cases of severe peritonitis the pain will be abolished. Measurable relief only should be looked for, with alleviation of the terrible colicky pains so characteristic of the disease in its full development. I have never been a believer in the treatment by the use of anodynes exclusively, and think it absurd to talk, as I have heard, of purging the patient by the use of opium and bella-

donna. If we had six months in which to work, and could first establish the opium habit in the patient, we might, perhaps, encourage diarrhœa, or at least not interfere with it by the administration of opium. In a disease, however, which lasts usually but a few weeks at the very outside, such an expectation can end but in disappointment.

The treatment that will give the best results, according to my view, is the following: in all cases in which no physical obstruction can be diagnosticated, for which operation must be at once recommended, and this should include doubtful cases in which operation may subsequently become necessary, there should be prescribed liquid diet, small quantities every two hours, and every two hours a quarter of a grain of opium, and one-twelfth of a grain of extract of belladonna. To this may be added, if it should seem advisable on account of pain, the administration twice, or at the outside, four times in twenty-four hours, a one grain powdered opium suppository. At the same time injections of warm water, with or without soap, should be given once to three or four times daily. If flatus is passed, the case continues to be a very hopeful one. This course should be rigidly adhered to for from twenty-four hours to five days, or possibly longer, when the time will have arrived at which it becomes necessary to consider the propriety of using some sort of aperient.

Purgatives are given in peritonitis for two distinct purposes: first, to increase the peristalsis, and thus overcome obstruction; and, second, to induce large watery movements, for the purpose of directly depleting the abdominal, and especially the intestinal, bloodvessels. After operations, inflammation in greater or less degree is so common, and we are so well aware that it is liable to occur, as to be always prepared to meet it. This being the case, it may be met in its very incipiency, and if inflammation can be aborted, it is under such circumstances. The explanation of the success, therefore, of surgeons in treating peritonitis with large doses of saline purgatives would seem an easy one, for they deal with a stage of the disease which never comes under the management of physicians, as people in the early stages of the disease do not seek advice, and, besides, if they did, the differential diagnosis between idiopathic peritonitis in its earliest stage and enteritis, or mere intestinal irritation would be an impossible one. No one, I think, should deny surgeons the credit their courage deserves for having instituted this revolutionary method of treatment, for, measured by our old standards, it is revolutionary; but, at the same time, we must not err upon the other side, and with undue haste conclude that the method is applicable to all cases. I have long been of the opinion that the old surgical practice of shutting up the bowels for a week, with opium, after an operation for hæmorrhoids, was a bad method.

Having, then, quieted our patient somewhat during the first few days of attendance, with injections and liquid food, and belladonna and opium, and at the same time been very careful not to induce narcosis, or in the least to depress the respiratory forces, for, if we do, the remedy will be worse than the original disease; we must, as already said, consider the propriety of getting the bowels moved. The decision in regard to the precise moment at which this attempt is to be made is, in my opinion, one of the most delicate questions that can arise in therapeutics, and gives to each of us, when we meet it, an opportunity to show a real genius for the treatment of disease. The medicine, however, which shall be given is very easy to decide upon—here there is no inflammation in its early stage, and therefore there can be no question of aborting it. Salines could only act upon the bowels like other drugs, relieving tension, if you like, by abstracting water directly from the intestinal bloodvessels; but, so far as the mere moving of the bowels is concerned, they are by no means so effective, or, as the laity call it, "searching," in their action as some of the vegetable purgatives. Any one who has been called upon to treat cases of fæcal accumulation (a paper upon this subject was published some years ago by the author, in the *Transactions of the College of Physicians of Philadelphia*), will have learned how useless and ineffective are salines if the bowels are very sluggish, while small and repeated doses of vegetable purgatives are perfectly satisfactory, and certain in their effects. In such cases salines, and even castor oil, will induce large watery stools, but no fæcal matter is brought away, and it seems as though the fluid material had come from below the accumulated fæces, or came by, and the patient is no better off than before, though probably he will have suffered much pain. No better combination can be given than a pill consisting of a twelfth of a grain of extract of belladonna, a quarter of a grain of extract of nux vomica, a quarter or an eighth of powdered aloes, and a half or one grain of rhubarb. This should be given at first once or twice in twenty-four hours, and, if violent pain be set up—which, however, seldom happens—it should be stopped, and the opium and belladonna every two hours used again for a day or two, when the attempt with the aperient may again be made. After a day or two the pill may often be given every four hours, and I have often seen the obstruction give way under this treatment, and the patient entirely recover.

It would be most unfortunate, it seems to me, for the science of medicine, and still more so for those who, in the future, are to suffer from peritonitis, if the treatment of the disease with sedatives should be entirely abandoned, as has been recently recommended. Let us look at the question reasonably, and without prejudice, and in

future assign to one class of patients operation by a competent surgeon, and saline purgatives afterward, if those skilled from a study of the subject in that paticular direction judge that to be the proper course; and to the other, a reasonable use of anodynes and injections, with moderate doses of vegetable laxatives when the time comes for their administration. Because, in the past, the sedative method of treatment has been abused, and patients have been hurried out of the world by the unwise management of incompetent physicians, who have narcotized them, is no reason why we should cast aside what is good in the method, any more than it would be wise for us now to assume that, because the administration of saline purges is advisable in the surgical treatment of some cases, it is, therefore, to be looked upon as a panacea in the disease, and the treatment to be recommended in all cases.

For my own part, I am a firm believer that the disease may arise idiopathically, and, when I say this, I mean from an attack of enteritis, or violent indigestion, or from chilling of the body, just as I believe pleurisy may arise, and, in such cases, it is reasonable to suppose that the inflammation very soon becomes more or less generalized, though, of course, it must have had its origin at some point. Such cases as these, if it be conceded that they ever arise, are not amenable to surgical treatment, for there is no point of special obstruction, and operation could not effect any good, unless by merely cleansing.

In conclusion, I cannot perhaps, better emphasize the correctness of the statement that the treatment by sedatives should not be abandoned in all cases of peritonitis, than by calling attention to the fact that in many cases in the past, and the same thing is certain to occur again in the future, post-mortem examination has demonstrated that the disease was so extensive, or of such a nature as to be necessarily incurable. Under such circumstances, I think no one will dispute that the province of the physician is to do what he can to soothe pain, and to make the last days and hours of the patient as endurable as circumstances permit, and no other one drug will conduce so much toward this end as opium.—Dr. Meigs, in *Med. News.*

HINTS FOR THE TREATMENT OF SLEEPLESSNESS.

e following *résumé* of an article by Dr. Ec es, on the treatment of sleeplessness, is publis d in the current number of *Gaillard's Med. Jo* :

Hot bath, taken just before settling quietly fo the night, is most valuable in producing a dr mless sleep, though this does not usually last m han four hours, and is sometimes followed by a period of great wakefulness, relieved only by a short morning doze. Method of giving the bath most important. Bath-room should be at temperature of 65° F., and this to be raised during bath to 70° F. Patient to be at once stripped, and then the stooped head and face rapidly douched with water at 100° F., to dilate brain vessels; next whole body, except head and face, to be immersed in bath at 98° F., and this temperature rapidly raised to 105°—110° F. In about eight to fifteen minutes, when the at first accelerated pulse has fallen to a slow, full, steady, and compressible beat, the patient must be slowly raised, closely wrapped in warm blankets (a loose pyjama suit is a good contrivance), and conducted to the bedroom without any haste and at as small personal effort as possible. On reaching the bedroom he will be dry. Let him then at once don his night-clothes and immediately lie down with the head well raised, a hot bottle to the feet, and the body well covered with bedclothes. The bath probably acts by reducing the supply of blood to the whole of the brain, thus decreasing the functional activity equally throughout, and so placing it in the most favorable condition for complete functional rest, to the exclusion of the partial activity of certain centres which would induce dreaming. It has proved most useful for the relief of disturbed sleep in persons who have either ceased to be influenced by ordinary hypnotics, or in whose cases their use is contra-indicated. The bath itself, however, is contra-indicated in extreme anæmia, emaciation, aortic valvular disease, and atheroma.

2. *Massage at bedtime.*—Valuable in organic cardiac mischief, and in the very large number of cases in which functional weakness of the heart and circulation generally is a feature of the nervous debilitated constitution. Two cases of aortic regurgitation mentioned, in which permanent benefit resulted, and one of aortic aneurism where the improvement was only temporary. On conclusion of the kneading the patient must at once compose himself to sleep. Its performance must be rapid, commencing with the abdomen and passing to the back, arms, and legs, with as little exposure of the parts to the outer air as possible, so that a layer of warm air may be maintained between the closely covered limbs and the bedclothes. The manipulations should be directed not so much to the evacuation of the lymphatic and venous vessels of the parts dealt with, as to the rapid and sufficient stimulation of the sensory nerves with the dilatation of the arteries over as large an area as possible. This kneading no doubt acts in the same way as tapping the abdominal parietes of a frog, which Goltz showed greatly dilated the abdominal vessels and distended them with blood, whilst it reduced the frequency of the pulse.

3. *Warm abdominal compress.*—Take two pieces

of twilled calico, half a yard wide and four yards long; roll these up lightly and raise them to a great heat in a closed earthenware vessel in a hot oven. Immerse as much of one as is necessary to cover the abdomen in water, and apply closely to the abdomen, then rapidly and firmly roll the rest of the bandage round the abdomen and loins; take the other hot bandage out of the earthen vessel and wrap it firmly round the first. In this way heat and moisture are kept applied to the abdominal walls, keeping up the free circulation of blood and soothing the nervous system. Schüller put a warm compress on the belly of a rabbit, and having removed the cranial walls, he noticed that an immediate and long-continued contraction of the meningeal vessels, with slowing of the cerebral movements resulted.

4. *The wet pack.*—This is most useful in those cases of erethetic neurasthenia resulting from prolonged overwork, mental distress, morphine habit, chloral drinking, and chronic bhang-poisoning. Any immediate beneficial results cannot be expected in these cases. The mechanical stimulus of massage temporarily excites rather than soothes the ill-balanced nervous system. Drugs are contra-indicated and moral suasion is useless. Should the patient's surface temperature be subnormal (*i.e.*, foot under 90° F. and palm less than 95° F.), moderately firm friction of the limbs and trunk should be employed to raise the superficial warmth. The bladder should be evacuated. The patient should have the pack as soon as the previously retarded circulation begins to be accelerated. The night-clothing should be well warmed and put on as quickly as possible. With all four the recumbent position must be maintained in a quiet, cool, well-ventilated room, the diet must be carefully modified, and daily massage performed.

DISINFECTION AND DISINFECTANTS.

Conclusions of the Committee on Disinfectants of the American Public Health Association.

The most useful agents for the destruction of spore-containing infectious material are:

1. *Fire.* Complete destruction by burning.
2. *Steam under pressure.* 105° C. (221° Fahr.) for ten minutes.
3. *Boiling in water* for half an hour.
4. *Chloride of lime.* A 4 per cent. solution.
5. *Mercuric chloride.* A solution of 1:500.

For the destruction of infectious material which owes its infecting power to the presence of micro-organism not containing spores, the committee recommends:

1. *Fire.* Complete destruction by burning.
2. *Boiling in water for* ten minutes.
3. *Dry heat.* 110° C. (230° Fahr.) for two hours.
4. *Chloride of lime.* A 2 per cent. solution.
5. *Solution of chlorinated soda.* A 10 per cent. solution.
6. *Mercuric Chloride.* A solution of 1:2,000.
7. *Carbolic acid.* A 5 per cent. solution.
8. *Sulphate of copper.* A 5 per cent. solution.
9. *Chloride of zinc.* A 10 per cent. solution.
10. *Sulphur dioxide.* Exposure for twelve hours to an atmosphere containing at least 4 volumes per cent. of this gas in presence of moisture.

The committee would make the following recommendations with reference to the practical application of these agents for disinfecting purposes:

FOR EXCRETA.

(*a*) In a sick-room:
1. Chloride of lime in solution, 4 per cent.
In the absence of spores:
2. Carbolic acid in solution, 5 per cent.
3. Sulphate of copper in solution, 5 per cent.
(*b*) In privy vaults:
1. Mercuric chloride in solution, 1:500.
2. Carbolic acid in solution, 5 per cent.
(*c*) For the disinfection and deodorization of the surfaces of masses of organic material in privy vaults, etc.:
Chloride of lime in powder.

FOR CLOTHING, BEDDING, ETC.

(*a*) Soiled underclothing, bed-linen, etc.:
1. Destruction by fire, if of little value.
2. Boiling for at least half an hour.
3, Immersion in a solution of mercuric chloride of the strength of 1:2,000 for four hours.
4. Immersion in a 2 per cent. solution of carbolic acid for four hours.
(*b*) Outer garments of wool or silk, and similar articles, which would be injured by immersion in boiling water or in a disinfecting solution:
1. Exposure in a suitable apparatus to a current of steam for ten minutes.
2. Exposure to dry heat at a temperature of 110° C. (230° Fahr.) for two hours.
(*c*) Matresses and blankets soiled by the discharges of the sick:
1. Destruction by fire.
2. Exposure to super-heated steam, 105° C. (221° Fahr.) for ten minutes.
(Mattresses to have the cover removed or freely opened.)
3. Immersion in boiling water for half an hour.
—*Jour. of Am. Med. Assoc.*

(*To be continued.*)

ROBT. SMITH, M.D., Durham County Asylum, Sedgefield, Ferryhill, England, May 25, 1886, says:—"I have tried your BROMIDIA, and found it so very satisfactory that I have used your preparation constantly ever since. I think I need say nothing more in its favor."

TREATMENT OF BRONCHO-PNEUMONIA IN CHILDREN WITH APPLICATION OF ICE.

Dr. Angel Money, Assistant Physician to University College Hospital, London, in a communication to the *Lancet*, says that he has treated many cases of severe broncho-pneumonia in infants and children with applications of ice-bags. The cause of the pneumonia does not, in his experience, influence the employment of the ice-bags. It may be used with much success even in cases of broncho-pneumonia secondary to tracheotomy, but still more favorably in cases occurring in influenza and measles. The smaller the child, the more marked, he says, are it effects. In very small infants, under one year of age, the ice-bag may be placed on the head, the hair having been previously thinned and shortened if necessary. The treatment, to be successful, must be carried out with a will, and systematically. As a general rule, the temperature in the rectum affords the best guide to the application of cold, and those acquainted with broncho-pneumonia well know the highly-marked remittent or also of intermittent character of these affections. Ice-bags have the objection that they often give rise to a little wetting of the child; but this has not, in his experience, proved injurous to the patient. Leiter's tubes have been tried, and have some advantages, being especially valuable when an intelligent nurse is in attendance. In severe cases, in which a rapid effect is required, two ice-bags have been placed on the head and one over the chief seat of consolidation in the lungs. With a little management, he says, it is not difficult to keep these in place; certainly not when the neuro-muscular prostration is marked, as it almost always is in severe cases. The chief merits of this treatment, he says, consist in the maintenance of the strength not only of the heart, but also of the respiratory centres and of the nervous and muscular systems. Although otitis media occasionally occurred, yet this has has not been more frequent than in cases treated without cold. Albuminuria, he says, is not rendered worse by the cold, nor have any cases of hæmaturia been observed, although Dr. Money has been at some trouble specially to collect and test the urine. The duration of the ase he declares to be, on the whole, shortened. ıvalescence is almost invariably rendered more id, doubtless because of the conservation of the d's energy.

Not only, he says, does the cold directly quiet heart and and steady the circulation, but the ning of the nervous system also acts indirectly the same direction. The respiratory centres similarly beneficially affected. The heat-ılating apparatus manifests more clearly the same beneficient action, and the temperature-chart shows a similar harmonious effect. It is curious to observe the almost immediate cooling of the whole surface of the body soon after the application of ice to any part, this cooling effect being best marked when the ice is applied to the head; the hands previously red and hot, become cool and slightly blue. The change is decidedly favorable, notwithstanding the supervention of the signs of feeble circulation in the exposed parts of the skin. Vomiting and diarrhœa, alone or in combination, may require treatment in the cases under consideration; the cold method, he says, does not increase diarrhœa, but certainly tends to stave off vomiting. Stimulants are to be used when indicated, but they are less apt to be necessary under this treatment. There is, he says, a saving of expense all around: the cost of the illness is lessened and there is less expenditure of reserve strength.—*Med. and Sury. Rep.*

THE TREATMENT OF VALVULAR AFFECTIONS OF THE HEART.

Dr. J. M. DaCosta, of Philadelphia, read a paper with this title, in which he showed that not a study of the valvular conditions, but a clinical observation of the effects of various medicines, was at the root of the matter in successful treatment. When compensation was good no drugs were to be given. If the heart was overforceful, sedatives were of value, and when the heart action tended to fail, small doses of digitalis might prolong life for years. The same valvular affection in different cases called for different treatment. He had seen cases in which aconite gave marked relief where digitalis could not be endured at all and made the condition worse.

As for dosage, he had usually found the best effects from digitalis when given in ten-drop doses twice a day; but some patients did better on ten drops of the tincture once a day; and a few did best on five drops every four to six hours. If the stomach became deranged the drug might be given by suppository. Where there was dilatation of the heart, much larger doses were needed, and it was well to alternate with alcohol and strychnine. When compensation failed, the pulse became rapid and compressible, and œdema appeared, large doses of digitalis, such as fifteen minims of the tincture every hour, were needed, aided by ammonia and brandy. In aortic regurgitation, digitalis was useful if the heart-fiber was sound; but if it was degenerated, arsenic and strychnine gave better results. There were cases of aortic narrowing or regurgitation where compensation was complete, and here no uneasiness was felt. In such cases the patient merely needed to be warned not to undergo sudden strain and to lead a temperate

life. Disturbances in regularity and rhythm scarcely called for medical treatment, although some cases of excessive irregularity were improved by belladonna. In dilated heart we had a condition where we wished to strengthen the heart so as to overcome passive venous stasis, and yet, if possible, without causing contraction of the arterioles and capillaries, which so increased the strain on the heart. Thus far we had found no one drug which would do this. It might in the future be accomplished by some combination. The cause and duration of a heart condition must be taken into account when treatment was considered; thus, three months having elapsed after the development of heart trouble with acute rheumatism, no cure was possible; iodides utterly failed. We should guard against a recurrence of the latter disease. The heart troubles coming on with age had no remedy. When there was decay or fatty degeneration of the heart, acids were of but slight aid; we had no remedy, and the strongest stimulants were needed. But in functional disorders much could be done. Rest, graduated exercises, good diet, and cardiac stimulants in small doses were indicated. Great attention was to be paid to everything bearing on the general health, so that the heart should be nourished with good blood; but iron was not of use; it produced constipation, fullness about the heart, headache, and a deranged stomach. Good food was better than iron; coffee and tea in small amounts were not harmful; neither were alcoholic drinks in small quantities if no gouty tendency was present. Light wines, except champagne, were allowable. He advocated gentle exercise and complete repose where there was a violent heart action. Cheerfulness was important; nervous people were apt to do badly, worry being equivalent to a short life in its meaning.

Palpitation had an appearance of strength about it which was fictitious. It really meant a state of weakness and needed ammonia and brandy. It was made worse by fatigue, opium, cannabis indica, or bromides. Nitroglycerin was often valuable where not too disagreeable to take. Speaking of the secondary results, diminution of the urine and its high specific gravity, and many urates without albumin, accompanied by headache and dyspnœa, was a state often relieved by diuretics, caffeine and benzoate of sodium being recommended. Dyspepsia was very common both with and without engorgement of the vessels. In the latter case purgatives and minute doses of calomel were of use.

As to the new drugs, he had found none equal to digitalis. They were of value when the latter could not be longer continued. Strophanthus, caffeine, and adonidine were discussed. Cocaine had a slight value; also chloride of barium was a general as well as a cardiac tonic and easy on the stomach, one-tenth of a grain in pill three or four times a day being the best dose to use. The author advised that a regular periodical examination be made of all persons having heart disorders, even if they felt well, in order that further changes might be met when they began, and life be thus prolonged.—*N. Y. Med. Jour.*

IS TETANUS CONTAGIOUS?—In a review of the more recent investigations into the pathology of tetanus, Mr. Wm. Anderson states *(Lancet)*: "It is certain that although tetanus may be induced by the inoculation of a specific micro-organism or of a specific ptomaine, its occurrence as the result of direct transmission from one subject to another has yet to be demonstrated by clinical experience." As a note on the above statement, I wish to record the following cases.

Chai S——, farmer, aged thirty-one, was admitted to the Foochow Native Hospital on Sept. 28th, 1887, suffering from a crushed toe. The accident had occurred three or four days before admission, and our native assistant, finding the toe gangrenous, amputated it. Symptoms of tetanus appeared on the following morning. The patient was removed to a little private room, carefully fed, and put on full doses of chloral and bromide of potassium. Severe opisthotonos developed, and death from exhaustion occurred on Oct. 1st.

Sin T——, preacher, aged thirty-one, was admitted to the hospital on Oct. 8th, suffering from internal bleeding piles. The bowel was cleared out with castor oil, and on Oct. 10th, the piles were ligatured. After operation the patient was placed in the little room in which the man Chai S—— had died ten days previously. Opium was given, and the bowels kept at rest till the piles dropped off. Recovery was rapid and uninterrupted. Nine days after the operation, considering himself perfectly well, the patient returned to his home, some three miles distant. On the following morning, Oct. 20th, he reappeared at the hospital, complaining of stiffness in the jaw and muscles of the back. Placed in a different ward, he was at once put on full doses of chloral and bromide of potassium. The rectum was washed out with warm carbolised water. The anal wound looked perfectly clean. Opisthotonos soon developed, but under the chloral the spasms were limited to two or three an hour. The urine was drawn off every six hours under chloroform. Nourishment was taken well, and good hopes were entertained of recovery. On the fifth day of his illness, however, influenced by some foolish friends, he took a gloomy view of his own case, gave up hope, refused nourishment, and died of exhaustion on Oct. 26th.

Remarks.—The coincidence of the two cases was striking, and strongly suggestive of contagi

Tetanus is not common in Southern China. In eight years of hospital practice, I had previously met with but one case. Our present hospital was built a year ago, is thoroughly ventilated, and occupies a healthy site. The room which the two patients occupied is 10 ft. by 8 ft. and has a wooden floor raised 2 ft. above the level of the ground. Though it appeared clean, the room had neither been swept nor washed since the first patient had died therein. Is it possible that our second patient was inoculated through the anal wound by dust containing specific micro-organisms generated by our first patient, and tetanus produced? The necessity for the thorough cleansing of a ward in which a case of tetanus has occurred is clearly indicated.—Dr. Adams, *Lancet.*

CHLORATE OF POTASH IN EPITHELIOMA.—M. Reclus has recently revived an old plan, somewhat in vogue forty years ago, of treating epithelioma of the skin by means of chlorate of potash, and is disposed to think that while this plan cannot be recommended wholesale as a substitute for excision, there are cases which, operative measures being, for one reason or another, inadvisable or impossible, may be satisfactorily treated in this way. One main point to be taken into consideration is the rapidity of growth. In order that chlorate of potash may have any chance of success, it must be employed for a considerable time. It is therefore only suitable in cases where the growth of the tumor is slow. Dr. Lemoine, of Lille, also has reported two cases of epithelioma, or cancroid as he calls it, where chlorate of potash was employed with eminent success. In one case the the tumor occurred in an old woman, occupying a large part of the left cheek, there being three enlarged glands at the angle of the jaw, and the skin around the ulcerated growth being tense, shining, and of a purple color. Half a drachm of chlorate of potash was given daily, compresses soaked in a solution being also applied to the cheek, and a large pinch of the powdered salt being sprinkled over the surface of the tumor twice daily. The discharge of ichor, which had been abundant, soon began to diminish, and in about three weeks signs of improvement began to show themselves round the edges of the ulcer; in six weeks time the diameter of the ulcer had d inished from 8 centim. to 4 centim., the surface h ing become hard and dry, like that of a scirrhus, a l the epidermis spreading over it a little more e h day. The glands had become smaller; in e it weeks the surface had completely healed over. T internal administration was continued for a f night longer; since that time—some nine u nths before the report was made—no return of t signs of the disease had occurred. The second c was an epithelioma of the great toe, which h lasted about two years. This was treated by the internal administration of chlorate of potash and by its local application for about ten weeks, at the end of which time complete recovery is stated to have taken place. Unlike Dr. Lemoine, M. Reclus confines himself to the external application of the chlorate of potash. He finds that this is not suitable for cases where the growth affects the mucous membrane, because of the greater depth to which it generally penetrates under these circumstances. It acts best where the tumor is confined to the skin; but it may be employed where the junction of the mucous membrane with the skin is affected.—*Lancet.*

THE DOCTOR AT HOME.—The doctor's wife, says the *Boston Med. and Surg. Jour.*, was not long since overheard telling her husband that he was pleasant everwhere save in his own family; and the doctor admitted that his good-nature was so exhausted in his daily visits to his patients that he was irritable when he reached his home. "Exactly how true the doctor's admission was in that particular instance," our contemporary continues, "it is impossible to say, but it seems as though in the ordinary course of a doctor's existence such a condition might often occur. Physicians certainly meet with many things in their daily rounds that try their tempers. Life is, for most of them, a constant study how to coax or to compel obstinate or ignorant, perhaps silly or even insane, patients to follow the course thought to be for their good. All these troublesome individuals must be reasoned with or influenced by some means to do as they ought. To carry his point the doctor must keep his temper. He usually preserves and outward calm, but if he is naturally quick tempered it is often at the cost of an effort which is exhausting. After such a struggle he reaches home in a state of irritability combined with mental and physical weariness, and under such circumstances it is not easy to meet little home trials with patience." We regret to notice in our esteemed contemporary a vein of apology for the irritable doctor which is hardly justifiable. The physician has no right to exhaust his good humor abroad and bring only an irritable mind to the domestic hearth. The doctor is expected to be a Christian or a philosopher, or both; and, if he is either, he can find no justification for being cross to his wife, and good-natured to his patients. We have known this evening irritability, which is not a characteristic of doctors by any means, to be relieved by a cup of bouillon, a five o'clock tea, or even a buffet-indulgence of a stronger character. Some physicians claim that effervescing caffein, or a good draught containing some mineral acid, relieves the tired and overstrung nerves. At any rate, the resources of religion, philosophy, the lunch-counter, and the drug-store, are open for the relief of this

sunset erythism that follows hard work.—*Med. Rec.*

HEART-SOUNDS WHEN THE BREATH IS HELD.—Will you allow me to caution practitioners against what I believe to be a not uncommon source of error in connection with certain conventional modes of examining the heart? The patient is told to "stop breathing." This he does with a more or less forcibly inflated lung, the result being that the contact and impulse elements of the heart-sounds—and we too often forget how large these elements really are—become exaggerated. In addition to this, the lung being not infrequently distended by a very deep inspiration, taken hurriedly at the moment when the patient is told to "stop breathing," the mechanical obstacle offered to a free passage of blood through the vessels of the lung is especially great. What the listener hears when the patient's breath is held will not be the cardiac sounds, simply unmasked by the suspension of the pulmonary sounds, but the former exaggerated and distorted by the accidental physical conditions of the lungs and the heart, and their surroundings in the thorax; which conditions are abnormal, for a state of forced, or even fixed, inspiration is not normal, and it *modifies* as well as intensifies the heart-sounds sensibly, as any close observer may detect. The very frequent appearance in the consulting room of cases of supposed heart disease, in which, when examined under ordinary conditions, nothing can be discovered to support the hypothesis of disease, may perhaps be to some extent accounted for by the method of examining to which I have ventured to object.

Another point of moment is the position of the patient. I do not think any physician is justified in affirming the existence of a morbid state until, or unless, he can satisfy himself that the known effects of change of position on the several performances of the cardiac mechanism are produced. It is a matter of very great concern that the number of persons living lives of misery because they have been told that "there is something wrong with the heart," is of late largely increased and increasing; while no inconsiderable proportion of such persons have, in fact, nothing whatever the matter with their hearts beyond. perhaps, some sympathetic disturbance. I am not now thinking of the scare produced by "anæmic" sounds, which, by the way, are too often misconstrued even by expert and experienced examiners, but of hypothetical "valvular disease" in hearts which are in no way organically affected, or even the subjects of exceptional muscular debility.—J. Mortimer Granville, in *The Br. Med. Jour.*

PUNCTURE OF A VEIN IN HYPODERMIC MEDICATION.—The patient was a woman of 50, who for eight months had been given hypodermics of morphine for acute neuralgic pains in the legs. The dose given on this occasion was a smaller one than usual, equal to one-third of a grain, and was injected into the forearm. The injection had been given with the usual caution, and on withdrawing the needle there was no bleeding, although sometimes there was a considerable amount. Almost as soon as it was given the patient called out that there was something wrong, as she felt a prickling, burning sensation all over, and a feeling as if her head and hands were swollen to such an extent as to burst the skin. When I saw her she was very flushed, the eyes were protruded, and she was greatly distressed. I gave her at once a dose of tincture of belladonna. She quickly became very excited, and inclined to struggle and cry out, till this stage passed off, when she turned extremely pale, and fell back on the bed in an unconscious state; the lips were blue, the skin was very gray, and the face much swollen; the pulse was very weak and fluttering, and the breathing stertorous. Shortly afterwards there was a convulsive movement with arching of the back, and both breathing and pulse became almost imperceptible. A little whiskey was administered by forcing open the clenched teeth, and in a few minutes the stertorous breathing recommenced, and she began very slowly to return to consciousness. Some citrate of caffeine was then given along with some digitalis, as she has a very weak heart. Another dose of the belladonna was shortly administered, and during the rest of the afternoon whiskey and coffee were given in small doses at frequent intervals. She was greatly prostrated, and suffered from intense weakness and very severe headache, which continued for two days. The morphine in this case had none of its usual effect, and no sleep was obtained for over thirty hours.—Dr. Balfour, in *Lancet.*

HIGHER MEDICAL EDUCATION.—Dr. Carl H. von Klein, of Dayton, O., in his address before the American Rhinological Association, spoke as follows of higher medical education: "I maintain that no one can receive a thorough medical education without a thorough academical training. The mind that is trained to academical knowledge is inspired to a nobler and sublime course in life, in righteousness, piety, benevolence, industry, sobriety, equity, and frugality, kindled with aspiration for a special pursuit in science to whatever calling by nature of human duty he may be assigned to. If the physician possesses an academical knowledge, he will make the boundless science of nature his study; he will aim to inquire from the beginning of the creation of man, and turn every stone to find inscriptions that may be engraved by organic life. He will form exalted ideas of monuments of primeval antiquity, and make use of all

antemundane ways that may be conjured from the outmost bosom of the earth, in order to throw a bright light upon development of medicine. Such men can have no other motive than human welfare. And when they read the works of great men who existed in all generations, whose carcasses have long decayed, but their heroic names still live, then they are kindled with high aspirations and are anxious to become heroes in the conquest of nature. Thorough education make men gentlemen by habit, by custom, by civilization, by law, and by dress. From the history of the infancy of our race unto the present day, developments of trades and arts are emerged from their primitive state to a perfection, by those who devoted their attention to one kind of skill, and made life almost double its value.

"Those stupendous facts in which the whole spirit of the nineteenth century moves, is due to a higher grade of education. In this age of multifarious learning, in which the whole spirit of humanity powerfully and wonderfully moves, cannot, as formerly, be overshadowed by ignorance and superstition. Thorough education will dissipate the darkness of empiricism and disloyalty to humanity. The inventions of surgical instruments is the wonder of this generation. Every day we hear of some new design that harnesses a new force, and assists in means of curing disease. The most useful of all of them are the different scopical inventions, and by their aid physicians are enabled to make correct diagnosis which leads to a rational treatment of disease of more obscure cavities. To the scopic appliances we are greatly indebted for the development of specialties in the practice of medicine, and yet has it not developed charlatans and empiricism? Has not the vaginal speculum been the cause of producing so great an army of gynæcologists, that 99 per cent. of the young men who graduate in their schools, regardless of their pathy, immediately equip themselves with a chair and a speculum? Has not the rectal-speculum encouraged the so-called pile doctors? And has not the rhinoscope been the means of producing thousands of travelling catarrh specialists, who pretend to see more with their appliances than the ordinary intelligent physician?

> "The doctor's optics must be keen,
> Who sees what is not to be seen."

OT AIR INHALATIONS IN PHTHISIS.—Two Ger-
n observers, or, to speak more correctly, two
ol rvers in Germany, have, independently of one
a her, been engaged in investigations on the
b tericidal property of heated dry air, and on the
m hods of utilizing this property for the practical
t tment of phthisical patients. Dr. Weigert,
w appears to be an American living in Berlin,
fi ing that tubercle bacilli outside the body die at a temperature of 41° C., and are adversely affected by one of 38°, had constructed an apparatus for the inhalation of heated air, and commenced to make trials on phthisical patients in the early stage recommended to him by other medical men, he himself not being in practice. At first a temperature of from 40° to 60° C. was employed, the air for inhalation being quite dry. This temperature was gradually raised as high as 80° C. The patients bore this hot dry air exceedingly well, and continued to inhale it for three or four hours a day during a month, the only unpleasant effects produced being hyperæmia and dryness of the mucous membrane. The general effects are represented as having been remarkable, patients who had been falling away picking up strength and becoming quite robust, the physical examination showing at the same time that the dulness and râles had perceptibly decreased. The bacilli in the sputum, which had been very numerous, rapidly diminished in number, and finally disappeared altogether. These observations were confirmed by several other medical men. Dr. Halter, of Lengerich, Westphalia, seems to have gone even further than Dr. Weigert, he having himself inhaled, and caused patients also to inhale, dry air heated to 190° C., with satisfactory results.—*Lancet.*

PREVENTIVE SURGERY, AS ILLUSTRATED IN KNOCK KNEE AND FLAT-FOOT.—Mr. Ellis (*Brit. Med. Jour.*) maintains that treatment of these deformities based upon strengthening of the muscular support is highly satisfactory. If it is admitted that failure of muscular support leads to yielding of ligaments and altered bony surfaces in joints, it appears that vigorous use of the muscles will make them strong and taut; that in this condition they relax and thus renew the overstretched ligaments, and also, by exerting constant pressure, remodify the altered contours of the bony surfaces of the joints. The mechanical law he states thus: According to the parallelogram of forces, a well-known law, if a force acting in the line from the knee toward the hip be opposed by a force acting in the line from the knee toward the foot, in a case of knock-knee, the resultant will be the diagonal of the completed parallelogram, or a tendency toward bow-legs. But all the muscles attached to the leg bones below and to the pelvis above do act in the line from the knee to the hip, while the weight of the body acts from the knee toward the foot, so these muscles draw the knee toward a straight line between the foot and the pelvis, when, as in the erect position, the foot is a fixed point. This action should be utilized in correcting knock-knee. This explains also the spontaneous recoveries which do occasionally occur, and the fact that muscular exercise will remove the deformity.

For flat-foot he maintains "for prevention pro-

mote, for restoration renew, the functions of the flexor longus pollicis." The tendon of this muscle subtends the plantar arch in the same relation that a bow-string has to a bow, and must exercise a most important influence on the flexible arch. The writer has obtained the most satisfactory results on himself, as well as others, by treatment based on these lines.

The exercise he recommends is to bring the foot to extreme tiptoe, the knee and hip to full extension, and then, after a pause, to suddenly and vigorously draw downward. This he obtains by raising a weight by means of a cord running over pulleys, by turning a wheel placed so high that the handle is with difficulty reached when at the highest part of the cycle, by pumping, if the handle is placed high enough, or by bell-ringing.

He believes that in flat-foot supports do more harm than good by preventing free action of the short flexor muscles. He is "equally certain that for knock-knee they are in principle wrong, and in practice unnecessary. So also of tenotomies in either deformity. Osteotomies and resections," he says, "I can only regard as unwarrantable mutilations."—*N. Y. Med. Jour.*

PELVIC CELLULITIS IN THE MALE.—In a recent number of the *Tidsskrift for Pract. Med.* Dr. Skjeldrup describes a case of pelvic cellulitus in a man fifty years old. The first symptoms in this case were vomiting, flatulence, constipation, abdominal tenderness, and tympanites. There was some pain over the cæcum, and resistance, on palpatation and dullness on percussion at the same point. Examination per rectum showed a tolerably hard tumor situated in the left hypogastrium; it was easily felt by bimanual palpatation. An aperient was given, with quinine and iodide of potassium, and wet compresses over the abdomen, for some days. The patient did not improve, the abdominal pain and distension became greater, the difficulty of passing flatus and fæces increased, and the patient was becoming more and more emaciated. An œsophageal tube was passed up to the sigmoid flexure, and a warm enema given producing a scanty evacuation. The tube was bent by the tumor, which displaced the gut backwards. The enema was repeated two days later, resulting in the copious evacuation of foul-smelling fæces. The patient then began to improve, and after a few more injections fæces were passed naturally. At the end of a month there seemed to be but a slight infiltration anterior to the rectum. The tumor, while it existed, was of an irregular shape, and sometimes appeared to be firm elastic and tender. In 1885 Dr. Muir of Selkirk published a case of pelvic cellulitus in the male.—*Jour. Am. Med. Assoc.*

UNTOWARD EFFECTS OF CASCARA SAGRADA.—Dr. C. M. Fenn relates in the *Therapeutic Gazette* for August his experience with the use of this drug, which he believes to be "not a harmless laxative, adapted for general and protracted use, but an irritant cathartic, requiring in its use great circumspection and care." As this is at variance with the estimate of the drug in the opinions of most observers, we will quote several of Dr. Fenn's unfortunate experiences in his use of the remedy. He noticed obstinate vomiting, violent cramps, bloody stools, and, in one instance, in which death occurred from cerebral anæmia and valvular disease of the heart, the patient had been taking a strong decoction of the bark, to the effect of which Dr. Fenn ascribes the existence of large patches of ecchymosis found in the mucous membrane of the stomach. This patient was seventy years of age, and very feeble; and the irritant action of the drug upon the gastric mucous membrane was believed to be the exciting cause of the fatal attack of cerebral anæmia. It may be worthy of note that in the greater number of cases the drug was used in combination, and in cathartic rather than small repeated doses. The latter plan of administration has proved most successful in the experience of most observers, and is rarely accompanied by any disagreeable effects other than a moderate degree of cramping pain.—*Epitome.*

GONORRHŒA—ITS TREATMENT IN THE FEMALE.—In a paper read before the Cincinnati Academy of Medicine, the writer says:

The following treatment has been instituted in a number of cases under my care: The vagina is thoroughly cleansed by the use of an alkaline solution. The solution should be strong and at a temperature ranging between 43° and 46° C. This procedure has a two-fold object: First, to remove as much of the vaginal epithelium as possible; second, to relieve the hyperæsthetic condition of the parts. The patient should now be placed upon the table, with the buttock elevated. After warming and oiling, a Ferguson's speculum should be carefully introduced. A tampon saturated with boro-glyceride is placed in contact with the cervix, and we now proceed to pack the vagina with acidi boraci, withdrawing the speculum as the process advances, until the entire canal is filled. If excoriations exist about the external genitalia, the labia should be separated and a piece of lint, previously dipped in boro-glycerine, placed between them. The application of a T bandage, or napkin, completes the first sitting. This dressing should be allowed to remain *in situ* for a period of thirty-six hours. After removing the dressing and using the vaginal douche, a solution of the hydrarg. chlor. corr., 1 to 1,000, should be used as an injection. The dressing is re-applied in the course of eight or ten hours. Seventeen cases under my care have been subjected to this line of treatment. Five of them were primary cases, two had had the

disease twice, six three times and the remaining four had been so frequently affected that they could not recall, with any degree of accuracy, the number of times they had been "diseased." Three of the primary cases required five applications of the acidi boraci, as did four of the six cases which had been three times affected. The majority required but four sittings. In no case did the discharge continue longer than fifteen days, the shortest period required being nine days. Treatment was adopted in all instances in from four to twenty-four hours after the appearance of the flow.—Dr. Haines, in *Cin. Lan. Clin.*

THE PROPER STATUS OF EXPERT MEDICAL TESTIMONY.—Nowhere in English-speaking lands is the status of medical expert testimony in a satisfactory state. Even in the highest circles of Scottish medical learning, eminent judges have commended the propriety of doing away with medical testimony altogether. If such unfavorable criticism can be incurred in one of the greatest centres of medical learning in the world, how much more do we risk it with our short terms of study and hasty methods! A change of the whole system of giving medical expert evidence seems to be a pre-requisite to placing it on a satisfactory basis. In our land every physician assumes to be an expert, and in the eye of the law one is as much so as another. If a lawyer needs medical opinions of a certain character in one of his cases, he starts out and searches till he finds, if possible, some physician who holds the views he desires. Counsel on the opposite side does the same. The result is that in nearly every case there is a conflict which brings medical testimony into disrepute. The only way out of it that I can see, is, for a corps of thoroughly qualified experts in various departments of medicine to be selected by some competent examining board to enlighten the courts on questions of legal medicine. These ought to act in each jurisdiction as a board with opportunities to confer together, as judges of the higher courts of law now do, and by mutual suggestions be enabled to present a mature opinion. If the judges of the highest courts in the land were compelled to give a decision, one by one, by compulsory answers on the witness stand, they would be necessarily brought into disrespect among the people.—Dr. Smith, in *Am. act. and News.*

OLIVE OIL IN HEPATIC COLIC.—At a recent ...eting of the Société Médicale des Hôpitaux, ... Chauffard stated that he had tried the olive ... treatment for hepatic colic with the following ...sults. Four hundred grammes of pure oil were ...ven in two doses, at an interval of a quarter of ... hour. The patient then remained lying on ... right side for three hours. M. Chauffard ...ated in this way several arthritic, obese women from 45 to 60 years of age, suffering from gall-stones. The symptoms improved, and in about seven or eight hours numerous half-solid, greenish concretions were evacuated. The size of these varied from a pin's head to a hazel nut. They were not, however, biliary calculi. Chemical analysis showed that they contained only a small quantity of cholesterin, and that they were principally composed of neutral fat and fatty acids. A cholesterin calculus does not undergo any modification by being immersed in olive oil. The oil absorbed cannot, therefore, dissolve the calculi in the bile ducts. During their experiments on animals, MM. Chauffard and Dupré observed that the oil introduced into the stomach never ascended above Vater's ampulla in the bile duct, and could not therefore soften and expel the calculi as had been supposed. When olive oil is introduced into the duodenum of the dead subject, between two ligatures, it never ascends into the bile ducts, even when the gall-bladder is half filled. Dr. Touatre's hypothesis that the oil ascends into the bile ducts as in the wick if a lamp is therefore erroneous. The remedy is, nevertheless, an efficient one. The dose of 400 grammes is absorbed without further inconvenience than nausea, and a slightly purgative effect. Observations reported by MM. Hayem and Bucquoy, show that this remedy may be employed with advantage in cases of biliary lithiasis accompanied by chronic icterus.—*Br. Med. Jour.*

SURGERY OF ABSCESS OF THE LUNG AND EMPYEMA.—In an address on the surgical treatment of abscess of the lung and empyema, delivered before the British Medical Association, at its meeting in Glasgow last August, M. T. Pridgin Teale spoke of the following points as gradually becoming clear in the surgery of the chest.

1. We are losing our fear of exposing the pleura and the lung, just as we have learned step by step how to deal boldly and safely with the peritoneum.

2. The evil of admission of air into the pleural cavity is not the mere exposure of the pleural surface to the air, is not that the lung collapses by the mere admission of the air, but that where there is a fairly healthy lung and pleura, the inrush of air reduces to a serious extent the mechanical power of the thoracic wall over the function of inspiration.

3. That in cases in which this mechanical difficulty threatens the life or impedes the recovery of the patient, surgery must decide upon the best method of closing the wound to the inrush of air, whilst allowing adequate drainage of any pus cavity to be carried on.

4. That the region of the diaphragm is a situation in which abscess amenable to surgical treatment frequently occurs, such abscesses often commencing below the diaphragm, and tending to discharge through the diaphragm and through the lung.

5. It seems probable that such abscesses can be more safely attacked through the lower angle of the thorax, provided there is dulness at the seat of puncture, than through the abdominal wall.

6. As to washing out the cavity of a large pleural, or pulmonary, or hepatic abscess, it is probable that antiseptic washing is of value in the early period, whilst the cavity is offensive; but that, as soon as the secretion has become sweet, washing is not only unnecessary, but tends to disturb the comfort of the patient, and retard his progress. If drainage is effective, so that fluid does not lodge, the fluid, which is sweet when secreted, should escape from the cavity before it has time to deteriorate.

7. As to the question of excision of portions of rib in treating empyema, on this point I am unable to speak from personal experience. The tendency of surgical opinion seems to be rather to reserve it for special and exceptional cases than to make it a general rule of practice.—*Med. and Surg. Rep.*

HYGIENE OF THE EYES.—Dr. Lincoln, of Boston, in the *Annals of Hygiene* formulates the following rules to be observed in the care of the eyes for school work:

1. A comfortable temperature, and especially let the feet be warm and dry.
2. Good ventilation.
3. Clothing at the neck loose; the same as regards the rest of the body.
4. Posture erect; never read lying down or stooping.
5. Little study before breakfast or directly after a hearty meal; none at all at twilight or late at night.
6. Great caution about study after recovery from fevers.
7. Light abundant, but not dazzling.
8. Sun not shining on desk, or on objects in front of the scholar.
9. Light coming from the left hand, or left and rear, under some circumstances from in front.
10. The book held at right angles to the line of sight, or nearly so.
11. Frequently rest by looking up.
12. Distance of book from the eye about fifteen inches.—*N. O. Med. and Surg. Jour.*

THE TREATMENT OF ACNE.—At a recent meeting of the Berlin Medical Society, Mr. Isaacs gave an address on acne, principally discussing the treatment of the disfigurement, and showing patients. After describing the various methods of treatment, he remarked that while employed in Lassar's klinik, where every form of treatment was tried, he invariably fell back on a ten per cent. napthol ointment, composed of napthol 10, sulph. precipit. 50, saponis virid. and vaseline each 20 parts. The ointment was applied to the affected parts, and kept there from half an honr to an hour, and then removed with lint oil. The following day there was slight redness and scaling of the skin. The procedure was repeated until the peeling was completed, which usually took place in from eight to fourteen days. Lately he had adopted the use of a resorcin ointment in obstinate cases: Resorcin, 2.5 to 5.0; zinc oxid. and amyl. 5.0; vaseline, 12.5. M. To be made into a soft paste. The ointment to be put on at night and allowed to remain on till morning. He had seen very good results in the ten or fifteen cases in which the treatment had been employed.—*Med. Press.*

PSEUDO-CASTRATION.—A foreign contemporary reports the case of a young woman, of a highly nervous temperament, who had not menstruated for ten years, since the sudden arrest of the flow, consequent on a fright. This suppression reacted on her, and made her a confirmed invalid. She had kept her bed for several years. The patient was anæsthetized, and Dr. Chiarleoni made an incision in the median line extending through the epidermis only. This was sutured and covered with an antiseptic dressing. The result of the operation was surprising. On the third, fourth and fifth days after the operation there was a copious discharge of blood from the uterus, with lumbar and pelvic pain. The ultimate effect was a marked amelioration of the patient's general condition, and she was soon able to get up and take exercise.—*Med. Press.*

DR. LOVE says: A point important to keep in mind is, that the oil of turpentine—cheap and always within reach—is one of the most valuable remedies in the materia medica, as a local and general stimulant, as a germicide and preventer of fermentation, and last, but not least, internally administered, as a checker of bleeding.

MORPHINE.

Translated from Heinrich Heine by the late Emma Lazarus.

Marked is the likeness 'twixt the beautiful and
youthful brothers, albeit one appears
Far paler than the other, more severe;
Yea, I might almost say, far comelier
Than his dear brother, who so lovingly
Embraced me in his arms. How tender, soft
Seemed then his smile, and how divine his glance
No wonder that the wreath of poppy flowers
About his head brought comfort to my brow,
And with its mystic fragrance soothed all pain
From out my soul. But such delicious balm
A little while could last. I can be cured
Completely only when that other youth,
The grave, pale brother, drops at last his torch.
Lo! sleep is good; better is death—in sooth
The best of all were never to be born.

—*Cincinnati Lancet-Clinic.*

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DIDACTIC LECTURES IN MEDICINE.

A few words regarding the necessity of medical students taking two courses of didactic lectures in all the important subjects of the medical curriculum, may not be inopportune, now that the subject has been briefly discussed, both in print and out of it.

Those who can look back, even a few years, and compare the clinical advantages enjoyed by the then students of medicine, with the advantages of to-day, in all our centres of medical education, must in all honesty admit that much has been done to advance the practical side of medical science; and none too much, indeed not even enough has been accomplished in this direction; but sufficient has been done to show that our teaching bodies recognize the fact that practical work is an absolute necessity in the present day of advanced scientific research. In Toronto the two schools have wisely united their forces, and by the assistance of the authorities of the hospital, a very creditable clinical course is now open to every lent who chooses to take advantage of it. But ing the winter months the number of students ctically precludes the possibility of each one ing a large amount of personal instruction at bedside. When we say instruction at the bed-, we mean not that he shall stand or sit with tient in sight while the lecturer gives an elab-e and well digested lecture on, say, pleurisy, hat he shall have the opportunity of examining the patient himself, under the guidance of his clinical teacher For, we maintain that a lecture at the bedside, thoughtful and interesting as it may be, is in no way more practical than one in the class-room, if the students can not examine the patient for themselves.

If we can by any means increase the amount of practical knowledge a student shall gain while at college, by all means let it be done. But we do not believe that the didactic teaching should be curtailed. One of the oldest and most popular teachers in Ontario has said, that a man who gains his education from books is narrow, and one sided in his views of nearly every subject he has undertaken to master; or in other words, that the self-educated man is a weak man. Now if there be one department of science more than another, in the study of which, the student requires careful guidance, it is medicine. It may seem unnecessary to an old practitioner, who has not only read but practised for years, that a youth should have lectures on, say, peumonia, repeated to him twice in a purely didactic way. But if it be considered that that same student has at best, but a hazy notion of peumonia, that his youth and inexperience make it impossible for him to seize upon the salient points and vital principles which go to give him a clear understanding of the disease, even though he had at his disposal the whole medical library at Washington; it will appear that a thorough didactic training is an absolute necessity. It separates for the student the grain from the chaff, it indicates the essential and salient points in any given subject, and saves an immense amount of labor, and time, which would otherwise be spent in wandering more or less aimlessly, far afield, in the maze of text-books in which he would be groping.

Of course the *quality* of didactic lectures, just as of tea or sugar, has much to do with their value. Medical students are, as a class, rather hard-headed, and endeavor to get a *quid pro quo* for their time and money. It is certain then that if the time occupied in didactic lectures could be more profitably spent in their own studies, there would the students be found, as is indeed the case when a lecturer is not up to the mark as regards the quality of the article he supplies. But the didactic lectures of all earnest, hardworking, skilful teachers, are we believe, always largely attended. If

text-books supply all the wants of the students, why are "grinds" and "coaches" so largely resorted to, not by the "wasters" at our colleges, but by the very best of our students? or why, to carry the question a little further, did so many of our professional men attend with such marked profit and pleasure the lectures of Prof. Osler, on "Cerebral Localization," given here a few days ago.

His lectures were didactic and yet were most enthusiastically received by the profession of Toronto. If men grown gray in the study and practice of medicine could listen profitably to didactic lectures given by one who has made a study of a special subject, what shall be said of a third or fourth year's student who could not (owing, we suppose, to some phenomenal cerebration) listen with profit to didactic lectures, if they were what all lectures should be, given by one who is a master of the subject under discussion, and with earnestness, zeal, and thoughtfulness.

There is little doubt that one or two summer sessions will ere long be insisted upon. This would supply the necessary time for students to take part in practical work of their year, and ensure a better and more practical graduating class, as it certainly would improve the young practitioner's position when called upon to battle with disease on his own account.

ELECTROLYSIS IN URETHRAL STRICTURE.

The action of electricity in causing absorption of inflammatory products has been largely canvassed during the past few years. Indeed, the number of diseases which have been reported as cured by the use of this agent, and the brilliant successes scored by Apostoli in the treatment of fibroids of the uterus, and by Newman and Belfield in urethral stricture, have been sufficient to lead any conscientious practitioner who credited the reports, to feel it a duty, and an imperative one, to pay some attention to the study of electricity as applied to medicine and surgery. So much has been written in current medical literature, that to the ordinary observer it seems almost as though electrolysis has come to be regarded as the new method, sure and reliable, for the treatment of that old enemy, urethral stricture. Latterly, however, a number of careful men have given the results of their observations to various medical journals, and their conclusions have not that roseate hue which glowed in the earlier reports of those who 'brought out' electrolysis in the treatment of urethral stricture. Dr. Keyes, N. Y. *Med. Jour.*, says bluntly that the method is a failure. He states that the ideas concerning the method may be summarized thus:—1. "That any one by following certain rules may use the method successfully. 2. That electricity does no harm to the urethra. 3. That stricture cured by electricity is dissipated by absorption, and the urethra remains permanently open." In eight cases observed by Dr. Keyes, one of which was treated by Dr. Newman himself, and the others by Dr. Keyes, no good results were obtained. The cases were typical ones, so that the question is no longer even an open one. Dr. Keyes closes his article as follows:

"I may state that electrolysis with a very mild current—I prefer to put it at less than two milliampères and a half—does no harm; in fact, does nothing that I can appreciate, and does not interfere with the benefit to be derived from ordinary dilatation. I believe that a strong current is full of danger, both immediately from irritating effect and ultimately from cicatricial effect; and that employment of the negative pole does not prevent this. My study of the subject and the experience it has brought me, digested with all the impartiality I possess, lead me to state that the allegation that electricity, however employed, is able to remove organic urethral stricture radically, lacks the requirement of demonstration. The confidence of its advocates that it will radically cure organic fibrous stricture is, in my opinion, due either to the combined credulity of the patient and imagination of the surgeon, or to some special but fortuitous act of Providence, upon the co-operation of which, in the case of his own patients, the general practitioner cannot with any confidence rely."

Dr. Thomas, of Pittsburg, in the *Jour. of the Am Med. Assoc'n*, gives the details of a case he attempted to cure by the new method. He says that after two months' treatment his patient was worse than he had been when the treatment by gradual dilatation was abandoned. He also shows that even according to Dr. Newman's own report, none of his (Dr. Newman's) cases were actually cured. He gives the electricians credit for hon-

but thinks that whatever degree of cure has been effected by them has been accomplished "purely by the dilating effect of their bougies."

TRANSPORTATION OF DEAD BODIES.

The question of the transportation of the bodies of persons who have died of communicable diseases is one which we think not well understood by the great majority of the profession, and much needless worry and trouble is often experienced by the friends of the dead person, as well as by the medical man in attendance, and the officials of railroads, steamboats and omnibus lines. The following rules which have been recently adopted by the Michigan State Board of Health, seem to be very full and explicit; we therefore append them for the benefit of such of our readers as may not receive copies of the transactions of that Board. Their careful perusal, illustrating as they do, principles, will we believe repay any professional man, even though he may not be called upon to superintend the removal of such dead bodies.

1. The transportation of the bodies of persons dead of small-pox, Asiatic cholera, typhus fever, or yellow fever is absolutely forbidden. 2. The bodies of those who have died of diphtheria, scarlet fever, typhoid fever, erysipelas, measles, puerperal fever, and other contagious, infectious, or communicable diseases, must be wrapped in a sheet thoroughly saturated with a strong solution of not less than two per cent. of the bi-chloride of mercury, and encased in an air-tight zinc, copper or lead-lined coffin, or in an air-tight iron casket, and all enclosed in a strong, tight wooden box. The coffin or casket must also be surrounded in space between coffin and outside box by sawdust saturated with a solution of chloride or zinc, or bi-cloride of mercury of same strength as above. 3. In cases of contagious, infectious, or communicable diseases, the body must not be accompanied by persons who, or articles which have been exposed to the infection of the disease. And in addition to permit from Board of Health, agents will require an affidavit from the shipping undertaker, stating how body has been prepared, and kind of coffin or casket used, which must be in conformity with rule 2, and that the health officer of the locality to which the body is consigned, has consented to the proposed shipment, and has had such timely notice of the hour of its arrival within his jurisdiction as will enable him to supervise its reception. 4. The bodies of persons dead of diseases that are not contagious, infectious, or communicable, may be received for transportation to local points in same state; when encased in a sound coffin or metallic case, and enclosed in a strong wooden box securely fastened, so it may be safely handled. But when it is proposed to transport them for a considerable distance, they must be encased in an air-tight zinc, copper, or lead-lined coffin, or in an air-tight iron casket. If any other kind of coffin is used, the body must be properly embalmed. 5. Every dead body must be accompanied by a person in charge, who must be provided with a ticket, and also present a full first-class ticket marked "Corpse" and a permit from Board of Health, giving permission for the removal, and showing name of deceased, cause of death, and whether of a contagious or infectious nature. 6. The permit from Board of Health must be issued in duplicate, the original to accompany body to destination, the duplicate copy will be retained by agent at initial point, and sent to the General Baggage Agent. 7. It is intended that no dead body shall be removed which may be the means of spreading disease, therefore, all disinterred bodies, dead from any disease or cause, will be treated as infectious and dangerous to public health, and will not be accepted for transportation unless said removal has been approved by the State Board of Health, and the consent of the health officer of the locality to which the corpse is consigned, has first been obtained.

REPRESSION OF MENSTRUATION AS A CURATIVE AGENT IN GYNÆCOLOGY.—Dr. Gehrung, read a paper (*Am. Jour. of Obstet.*) on the above subject, at the Amer. Gyn. Society, in which he gave his treatment of excessive menstrual flow. Strong women should lose little blood at such a time, weak and anæmic, little or none. Most women lose too much, and as a consequence, many suffer from neuralgia, neurasthenia, melancholia, anæmia, chlorosis, uterine diseases, etc. The tampon is *the* remedy which stands at the disposition of every practitioner, by which he may regulate to the best of his judgment, the amount of loss in menstruation according to the necessity of the case. It is

preferably made of absorbent cotton, rolled into little balls the size of a walnut. These being squeezed dry from a solution of 1 in 100 to 2 in 100 alum and water, are packed around and upon the cervix until the vagina is filled. This is left untouched for forty-eight hours, unless the bleeding should recur sooner, when it should immediately be applied fresh. This not only lessens or stops the hæmorrhage, but also shortens the duration of menstruation; as a woman habitually bleeding for eight or ten days may be entirely well in two or three days. Rest is desirable during the treatment. If the tampon has been applied during the whole time of the usual duration of menstruation in a given case, and if after the bleeding had ceased it recommences, one may almost be sure of finding intra-uterine vegetations, tumors, etc.

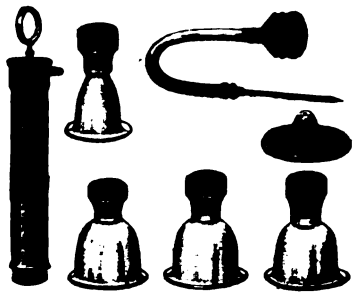
ANTIFEBRINE IN GOUT.—Dr. J. N. Love (*Weekly Med. Review*) has relieved a case of gout in a patient seventy-six years old, who had suffered with acute attacks of great violence at intervals for many years, with five-grain doses of antifibrine every two hours, in solution with brandy to avert its depressing effects. In twenty-four hours all suffering had ceased, and all evidences of inflammation about the joint had vanished.

CATHETERIZATION. — Dr. Zandell, in a paper read at the Louisville Surgical Society, discussed the propriety of suddenly emptying the distended bladder. He showed that after forty years experience in such cases, he had never experienced any trouble whatever follow the emptying of the bladder completely and on the spot, no matter how much, nor how long it had been distended. The chief precautions observed in the use of instruments have been: (1) That the patient be warm, perspiring if possible. (2) Everything about him warm, such as air, bedding, instruments, hands, and oil. The heat acts either by causing the relaxation of the tissues, or by checking the spasm created by repeated unsuccessful attempts. Dr. Bloom suggested that pilocarpine be given to relax the tissues and to produce perspiration instead of, or along with heat.

RESORCIN.—Theodore Maxwell (*Lancet*) has used resorcin successfully in chronic painful ulceration of the tongue when other drugs have failed.

DR. BLACK'S CUPPING APPARATUS.

A very ingenious apparatus for cupping, is that invented by Dr. Black. In this apparatus we have the cup, breast-pump and aspirator, admirably combined, and the combination is so simple that it is well worthy of our highest commendation. We all know how readily the aspirator gets out of order, and is then a dangerous instrument and worse than useless; in the apparatus of Dr. Black we have at least the guarantee, in the simplicity



of the instrument, that it will not readily get out of order. As a breast-pump, it has the advantage in producing gentle and easily modified suction, which is continuous in its pressure. As a cupping apparatus, we make bold to say, it is not equalled by any apparatus at present known to the profession. It will prove an indespensable instrument to the general practitioner, and every physician will find it time profitably spent in acquiring a personal knowledge of its uses and advantages.

TENSION IN SURGICAL PRACTICE.—Mr. Bryant, in his Hunterian Lectures, says: "Time tells me that I must now draw to a conclusion; and as I have applied the principle of practice I am advocating to every variety of inflammation of bone, I may be allowed to summarize the whole in the following conclusions: 1. The pain associated with every form of inflammation of the bone or of its periosteal covering is due to tension, and the severity of the pain is a fair measure of its intensity. 2. In acute inflammation of the bone or of its periosteum, tension is the chief cause of necrosis; and in the subacute and chronic forms it is a potent cause of their chronicity, as well as of the destructive changes which, as a rule, follow. 3. The relief of tension, wherever met with, when the result of inflammation, is an important principle

of practice which should always be followed. In bone the principle is most imperative, on account of the difficulties under which natural processes act in that direction, by reason of the absence of elasticity or yielding in bone, and by reason of the anatomical arrangements of its vessels which favor blood stasis. 4. To relieve tension in the softer tissues of the body, the local application of leeches, local or general venesection, acupuncture, aspiration, punctures, and incisions may be requisite; whereas, to carry out the same practice in endostitis or periostitis, subcutaneous or open incisions down to the bone, and the drilling, trephining, or laying open of bone by a saw may be required, the choice of method having to be determined by the requirement of the individual case. 5. In the early or hyperæmic stage of inflammation of bone, before destructive changes have taken place, experience seems clearly to indicate that the relief of tension—as indicated by a dull, aching pain, etc. -by means of drilling or trephining into bone, may arrest the progress of the disease, and help toward a cure by resolution; whereas, in the exceptional cases in which this good result does not take place, suffering is saved and destructive changes are limited. 6. In articular ostitis of every kind and variety and in every stage this mode of treatment can not be too strongly advocated, as tending toward the prevention of joint disease. 7. In acute or chronic abscess of bone, diaphyseal or epiphyseal, the abscess cavity must be opened as any other of the soft parts, drained, and dressed in the most appropriate way—the principles of treatment being the same in hard or soft tissues, although they are modified by the anatomical conditions of the parts."

Skin Diseases.—Dr. J. Clark M'Guire, of Louisville, in a paper on cutaneous diseases *(Am. Pract. and News)*, writes very highly of the use of *fixed a ..sive dressings*. He uses liquor gutta-percha (l ..matic ine), and the plaster mulls introduced b ..rof. Unna, of Hamburg. Liquor gutta-percha i ..st prepared by dissolving ten per cent. of the g ..a-percha in chloroform. A clear liquid results, f ..g an artificial cuticle that will adapt itself t ... the inequalities of the skin, and is easy of a ..ation. It may be rendered much less noticea ... the skin by adding a little carmine. The plaster mulls are prepared by spreading the plaster mass on muslin; the adhesive material is the oleate of aluminum, or the best India rubber, using as little as possible, not more than two to five grains to the square metre. Many medicinal substances are incorporated with the plaster, such as oxide of zinc ointment, tar, iodoform, icthyol, boric acid, salicylic acid, in fact nearly every drug we use in the topical application for the relief of cutaneous diseases. The plasters do not deteriorate from age. In making the applications, the scales and crusts should be removed if present, and the hairs cut or shaved off. It is best adapted to those cases where there is little exudation of serum, as in psoriasis, dry scaly eczema, rosacea, and certain circumscribed lesions as chloasma, the vegetable parasitic diseases, lupus vulgaris, etc.

Iodoform in Hæmoptysis.—MM. Chauvin and Jovisenne give *(Prog. Méd. Pract.)* a short account of the action of iodoform in hæmoptysis, at first given with tannin, and later alone:—In the first six cases pills were given containing iodoform, ¾ gr., and tannin, 1½ gr. Sometimes the hæmoptysis stopped after two of these had been taken; in one severe case of advanced phthisis, as many as five were given *per diem* for three days before the bleeding ceased. In another patient, who had been in the habit of having eight or ten attacks of hæmoptysis in the year, which had been treated by large amounts of ergotine and morphine, three of the iodoform and tannin pills stopped the hæmoptysis four months ago, and there has been no recurrence since. In the three cases recorded in detail, in which the iodoform alone was used, the results were very similar. The authors came to the conclusion that gr. ij. of iodoform *per diem*, in three pills, was an appropriate dose for moderately severe cases, and that more than eight or nine pills was not required in any case they had to deal with. This action they consider quicker than ergotine, and therefore more useful. In all the cases during the past year in which they had given it there has been no relapse, and, during the treatment, no disturbance of digestion.

Circumcision.—Dr. Norman Vogan, writing to *The Lancet*, says: As there is usually a great deal of trouble in the dressing after a circumcision in a child, perhaps a description of the method I

have lately adopted and found very successful may be of use to some of your readers, should you think it worth inserting in your widely read journal.

I pass a director under the prepuce as far as the corona glandis, and then pass a pointed curved bistoury along it, and divide the prepuce; then cut off the two triangular flaps thus formed, dividing the skin and mucous membrane together. All bleeding points are stopped by torsion. I use no sutures whatever, the skin and mucous membrane uniting quite well without any. I then guard the penis by a wire guard, similar to a vaccination shield, but larger and three-cornered, one corner passing under the scrotum, and the base being upwards. There is a tape attached to each upper corner to tie round the waist, and double tapes at the lower corner to tie round each leg. I use no dressing, but carbolised oil painted on the wound with a camel hair brush. The patient gets up the same day, or as soon as he feels quite recovered from the effects of the anæsthetic.

PLASTIC OPERATIONS FOR THE REPAIR OF NERVES.—The possibility of repair in nerves divided for even a considerable length of time, is now admitted. Sir William MacCormack, in a recent address delivered to the Midland Med. Soc. (*Brit. Med. Jour*), gave the following methods of treatment to be employed, the choice of method being determined by the circumstances of each case.

1. Transplantation into the gap of a piece of nerve taken from the same or another species of animal. 2. Uniting the peripheral end of the injured nerve to an adjacent uninjured nerve. 3. Cross union of two different adjacent nerves cut at different levels where union of the two portions of the same nerve was impossible. 4. Formation of a single or double pedunculated nerve-flap to bridge over the interval between the ends. 5. Encasing the two ends of the divided nerve in a bone drain which served as a means of fixation and also as a conducting medium for new nerve-fibres. 6. Sub-periosteal resection of a portion of the long bones of a limb to allow approximation and suture of the nerve-ends.

Return of sensation was obtained in favourable cases much earlier than formerly was thought possible, instances being given in which it had commenced after a very brief interval; the paths by which the impulses travelled being obviously along the old nerve-fibres in these cases, though for the most part, at any rate in case of long-standing separation of the nerve-ends, a development of new fibres was necessary for a successful result.

LECTURES ON CEREBRAL LOCALIZATION.—Dr. Osler, of Philadelphia, delivered three lectures on this subject at the Toronto School of Medicine, on the 22nd and 23rd ult. In lecture 1, he dwelt upon the development of the subject, particularly on its recent practical applications. The foundation of the doctrine on experimental and clinical evidence were reviewed and the motor centres were described and localized. The effects of irritative and destructive lesions were compared. In lecture 2, the sensory centres, as far as known, were considered, and the forms of aphasia briefly described. In lecture 3, the surface markings of the cortex were outlined, and the scope and limitations of cerebral surgery considered in relation to fractures, abscess, tumours, hæmorrhage, and epilepsy.

THE TEMPERATURE IN RELATION TO DIPHTHERIA.—It has been shown unmistakably (*Rep. Mich. State Board of Health*) that diphtheria unmistakably increases after the atmosphere is cold and dry, and decreases after the atmosphere is warm and moist. It is also shown that scarlet fever and small-pox are controlled in their rise and fall by the fall and rise of the temperature. Thus, though these diseases are due to the inhalation through the air-passages of a specific germ and are communicated from person to person, during the cold weather when the air-passages are most susceptible these diseases are most likely to spread.

THIRST IN INFANTS.—The following, from *Med Classics*, is worthy of attention: It is a mistake to suppose that because milk is a liquid food it is at the same time a drink which is capable of satisfying the thirst of infants. Although milk appeases hunger, it makes thirst more intense after it has remained some time in the stomach and digestion of it has begun. It is thirst which causes healthy, breast-nourished infants to cry for long periods of time in many instances. There are many cases of indigestion due to weakness or insufficiency of the child's gastric juice, which

would be greatly benefitted or even cured if the child were allowed an occasional drink of water.

INTUBATION OF THE LARYNX.—It is said (*Western Med. Rep.*) that Prof. Thiersch has abandoned the operation of intubation of the larynx. He has given it a thorough trial, extending over a period of some months, but with no results, so that he has resumed his former treatment—tracheotomy, with which his percentage of recoveries is about fifty. He ascribes his lack of success, as compared with American surgeons, in the matter of intubation, to a different type of the disease, thinking that in his cases the membrane is thicker and tougher and the constitutional symptoms severer.

SULPHONAL AS A HYPNOTIC.—Prof. Rosenbach, Breslau, after experimenting with sulphonal, comes to the following conclusions: 1st. That sulphonal, in doses of one gramme (15 grains), is an uncertain hypnotic. 2nd. That, in two gramme doses, sulphonal is a certain hypnotic, which fails only in the rarest cases; there are no unpleasant symptoms following its use. Rosin's general conclusion is, sulphonal, in doses of two grammes, is a hypnotic not inferior to morphine, chloral, and others, and, by reason of its freedom from injurious after-effects, even when four grammes are given, is to be recommended in all uncomplicated cases of insomnia.

PROPHYLACTIC TREATMENT OF HYDROPHOBIA.—Dr. J. T. Bright reports the prophylactic treatment of six persons bitten by dogs known to be mad, in the *Am. Pract. and News.* He kept the blood alkaline for three weeks by administering internally either carbonate of ammonia in seven to ten grain doses every two hours, or acetate of potassium in twenty grain doses every two hours, and by applying cotton saturated with aqua ammonia. When last heard from all of them were perfectly well. He thinks this eclipses Pasteur.

MEN UNRUPTURED AFTER LABOR AT FULL TERM.—Mr. Taylor reports a case (*Brit. Med. Jour.*) in which a woman was delivered of a child at full term and the hymen was left intact. He thinks the case very interesting from a medico-legal point of view, as illustrating cases in which the non-rupture of the hymen should not be taken as a sign of non-intercourse, rape, etc.

TO REMOVE FOREIGN BODIES FROM THE THROAT.—Dr. Beveridge, of the British Navy, says that for the removal of foreign bodies in the throat, such as pieces of meat, etc., a simple mode of relief is to blow forcibly into the ear. This excites powerful reflex action, during which the foreign body is expelled from the trachea. The plan is so easy of execution that, if there is anything in it, it ought to be generally known and applied.

THE LATE OPERATION AT THE GOVERNMENT HOUSE.—It is a matter of sincere congratulation to the profession of Canada that the operation lately performed by Dr. Grasett, at the Government House, Toronto, was, in every respect, successful. Drs. Temple, Strange and O'Reilly assisted. The case was one of multilocular ovarian cyst and was uncomplicated.

THE *Med. Register* gives the following prescriptions in different forms of dyspepsia:—

For dyspepsia accompanied with palpitations (Mac Robin)—

R.—Tinct. cardamom. comp., . 8 gram.
Spts. ammon. aromat., . 8 "
Sodii. bicarbon., . . . 4 "
Infus. gentian. . . . 180 " —M.

For flatulent dyspepsia (Heligan)—

R.—Spts. æther comp.,
Aq. camphor, . . . āā 30 gram.
Tinct. cardamom. comp., . 8 " —M.

Sig.—To be taken at one time, and repeated if necessary.

ANTIPYRIN IN SEA-SICKNESS.—Dr. William Goodell, of Philadelphia, writes to the *Med. Rec.*, showing from personal experience and observation that while antipyrin does not actually cure sea-sickness, it greatly alleviates the sufferings of those who habitually suffer on an ocean voyage, and materially lessens the unpleasant sequelæ, such as headache, nausea and pains in the bowels, which so frequently linger on for a considerably time after the acute stage is past.

THE celebrated Dr. Heinrich Von Bamberger, of Vienna, died on the 9th ult.

SIR WILLIAM JENNER has resigned the membership of the British Medical Association.

Books and Pamphlets.

HUNTERIAN LECTURES ON TENSION as met with in Surgical Practice, Inflammation of Bone, and in Cranial and Intracranial Injuries. Delivered before the R. C. S. Eng., June, 1888, by Thomas Bryant, F.R.C.S.E. London: J. & A. Churchill; Toronto: Carveth & Co. 1888; pp. 146.

The profession generally is perhaps aware that Mr. Bryant has long held ideas upon inflammation that do not agree with those held by many other observers. However that may be, he has in the present work given a very clear exposition of the subject of tension. To say more of an address delivered to so august and learned a body of men as constitute the Royal College of Surgeons of England, by so learned and practical a man as Mr. Bryant, would be superfluous. The lectures are well printed and should be of great interest to all practising surgeons.

THE LIFE INSURANCE EXAMINER: A Practical Treatise upon Medical Examination for Life Insurance. By Charles F. Stillman, M.D.; pp. 187. Illustrated. 1888. New York: The Spectator Co; Toronto: Carveth & Co.

The position occupied by Dr. Stillman, as Examiner to the largest and one of the oldest American Life Insurance Companies, should give the book a wide popularity. It embodies the experience of this company during a period of over forty years. There have been also many good points taken from the experience of numerous other companies. The author has spared no pains to make the book what it is intended to be, a complete guide to the medical examiner in giving the home office the information necessary to the acceptance or rejection of a candidate for insurance. We heartily commend it to all medical men who act as Examiners for Life Companies.

A MANUAL OF GENERAL PATHOLOGY: Designed as an Introduction to the Practice of Medicine. By Joseph Frank Payne, M.D., Oxon., F.R.C.P., etc. Profusely illustrated; pp. 522. Philadelphia: Lea Brothers & Co., 1888. Toronto: Vannevar & Co $3.50.

The author intends this work as an introduction to general pathology, including general pathological anatomy. It differs from most similar works, in not differentiating strictly between these subjects and special pathology. The amount of pathological histology is small, the author believing that too much attention has been given to forms of cells, etc., and that science will be better served by giving the student a broader conception of the subject. The etiology of disease has been taken up at greater length than is common in most works on the subject, and in this we think a real advance in the teaching power of the book has been made. It is also noticeable, that what may be termed medical pathology, has been discussed at more length than has surgical, because, says the writer, the surgical side has received, in this country perhaps, a disproportionate share of attention. The illustrations are exceedingly good, and many of them original.

BROWN'S MEDICAL DIAGNOSIS—A Manual of Clinical Methods, by J. Graham Brown, M.D., Fellow of the Royal College of Physicians of Edinburgh, Late Senior President of the Royal Medical Society of Edinburgh. Second edition, illustrated. New York: E. B. Treat & Co.; Toronto: Vannevar & Co. 1888. pp. 285; $2.75,

This last number of Treat's Medical Classics is perhaps the best of the whole series, although other excellent ones have appeared. It will be a boon to both students and practitioners. The work deals with the subjects under discussion in a very clear and complete manner. We heartily commend it to teachers, practitioners and students.

ESSENTIALS OF THE PHYSICAL DIAGNOSIS OF THORACIC DISEASES. By E. Darwin Hudson, Jr., A.M., M.D.; Prof. of General Medicine and Diseases of the Chest in the New York Polyclinic, etc. New York: Styles & Cook; paper, pp. 63.

This work was prepared for the use of the physicians in the class of General Medicine and Diseases of the Chest of the New York Polyclinic. It contains much useful information, well arranged and in a small space.

Births, Marriages and Deaths.

On Sunday, Dec. 2nd, 1888, the wife of T. H. Stark, M.D., Toronto, of a daughter.

At Toronto, on Dec 4th, Dr. J. E. Elliott, to Jennie, eldest daughter of Warring Kennedy, Esq., all of Toronto.

At Toronto, on Nov. 28th, Dr. W. A. Young to Annie Marguerite, only daughter of James Jennings, Esq., all of Toronto.

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Original Communications.

PREFERABLE METHODS OF FIXATION IN THE TREATMENT OF SIMPLE AND OF COMPOUND FRACTURES OF THE LEG.*

BY DR. N. A. POWELL,

Lecturer on Surgical Appliances and Assistant Demonstrator of Anatomy, Trinity Medical College, Toronto.

How to treat successfully a simple fracture of the leg is a mechanical problem which may be solved in numberless ways. Reduction secured and fixation maintained, consolidation almost uniformly follows. No one plan of treatment is so much better than all others yet advanced as to be the one first thought of by a majority of surgeons anywhere. If I attempt to classify a number of the methods now in use, to contrast their relative merits and deficiencies and to collect for your inspection a quantity of apparatus, it will not be because I have anything original or even new to present. Some, at least, of the appliances to which I shall call your attention are not heard of in practice here. There are those present who have had vastly more experience than myself in the use of certain other of the technical resources of surgical art here presented, and from them I hope to elicit such a practical discussion as shall more than make up for the defects in my own presentation of the subject. "Every surgeon," wrote B , in 1815, "sets a broken limb as he writes hi name, after a fashion of his own."

e get our creeds in our cradles and our rc ne ways of immobilizing fractures from the offi- ce nd schools in which our student days are spent. O in the rut it is easier to jog along than to n an effort to reach higher ground. Yet it is chiefly by the labors of those discontented ones, who are constantly striving to improve the means we have and to devise more perfect ones, that we make progress. The *un*fittest sometimes survives and the iconoclast is needed. To seek out and set in order the demerits of appliances which under the influence of certain great names have outlived their usefulness, is to do the surgical world a service which might rank equal with the services of those who have genius for construction rather than destruction.

I trust that both types are represented here tonight, and that the loose joints in this part of our surgical armour will be found and pierced, while at the same time we are strengthened by the free exchange of helpful suggestions. Young—that is very young—physicians are apt to have a special remedy for each disease or symptom, and to think they should have a special splint for each fracture. With ripening experience the tendency is to lessen the number of drugs used and to recognize that the essentials for fracture treatment are few and simple. An ample outfit, one with which many of us could get along very comfortably, need contain nothing ponderable beside thin basswood, mill-board, batting, bandages, cheese-cloth and plaster-of-Paris. The imponderable essentials are anatomical knowledge, the training of the hand and what I once heard Mr. Erichsen call, "surgical horse-sense."

From my point of view it hardly seems that profitable discussion can be had regarding a choice of methods in the treatment of the later stages of simple fractures of the leg. There does not appear to be room for much divergence of opinion. The complete-encasement of the limb by plaster-of-Paris bandages is admitted to be the procedure which gives to both patient and surgeon the greatest degree of security and comfort. So well known has this method become that I shall refer to but a few points regarding it. It has seemed to me worth while to have the crinoline or cheese-cloth, from which the bandages are made, boiled in a solution of washing-soda and then in clear water. This makes it an absorbent gauze; it will sink at once if thrown into water, and plaster will set in its meshes as well as on its surface. Plaster dressings made with it wear out like felt, instead of scaling off and cracking. If a web of cheese-cloth be rolled tightly on a wooden cylinder and

* d before the Toronto Medical Society.

tins placed in a lathe, it can, as suggested by Martin, of Boston, be cut in a few moments into bandages of any desired width. The cutting is done by holding one corner of a broad chisel against the cylinder while it is in rapid motion. I have brought a roll so divided with me to show you; each section is fifty yards long by three inches wide. Cheese-cloth will not tear like thicker cotton, and life is too short to waste in cutting bandage material by hand. For crinoline, the bookbinder's knife has been suggested, and this machine will smoothly and rapidly divide the cloth into strips.

The earlier a plaster bandage is used the thicker should be, in my opinion, the layer of cotton under it. Batting makes the best padding while swelling exists and the patient is kept in bed. After all swelling has subsided and the patient is allowed to go around on crutches, padding by a single layer of old shrunk blanket has some advantages over that by batting or wadding. Abundant cotton padding allows the leg to telescope down into its case, while blanket padding will make the support more perfectly crustacean in type, and will correspondingly relieve the injured part of the skeleton from pressure when the patient is allowed to be up and about. Over the padding I always apply a firm dry flannel or cotton roller. It distributes the pressure evenly and lessens the risk of undue constriction.

There is no analogy between a bandage so used and a "primary roller," that is, one used under splints, applied to a part only of the circumference of a limb. While so good a surgery as that by Agnew advises the primary roller, and we continue to meet with physicians who employ it, I feel justified in asking for an expression of opinion from those present regarding this dangerous relic of the dark ages. In applying the plaster bandage so as to cover in the heel, if each turn be carried over the instep, there will be such a thickening at this part that slight pressure from the hands of the assistant making extension, or a slight change in the angle at which the foot and leg are being held, will lead to the formation of a ridge on the inner surface to groove the tissue on which it presses. To avoid this it is better to go back and forth over the heel from one malleolus to the other, binding all down smoothly by two or three final turns carried over the instep. The more figures-of-eight we can put into a dressing of this kind the better will it be, and the more it is felted together and the air expelled from between its layers by rubbing with the hand the longer will it last. To strengthen it without increasing its bulk, the plan of interweaving two or more of the tin strips first advised by Dr. Fluhrer, is a good one. They should be cut from heavy tin plate, since common tin bends so easily as to be almost worthless. A single long strip crossing the sole and passing up to the knee on each side, gives the best support when the fracture is in the lower fourth of the limb. The strips should be perforated from each side and fixed to the limb by passing the bandage alternately over and under them.

Returning now to the treatment of the earlier stages of simple fracture of the leg, we find scope for endless differences of opinion and practice. What should the ideal dressing for a broken leg be and do? In answer to this question, permit me to quote from an address delivered by Dr. Gay, before the Massachusetts Medical Society: "It must be simple, comfortable, cheap, readily obtained, easily applied and removed, and must allow a frequent inspection of the limb without disturbing the patient. It must be applicable to all cases, capable of correcting any and all deformities and of retaining the fragments in their desired position for an indefinite length of time; not liable to produce abrasions or other mischief, and once properly adjusted it should require little attention during the progress of the case." Let us try by this standard some of the dressings in use here and elsewhere and note how far they fall short of our ideal appliance.

The support given may be by splints which are rigid or plastic, single or multible. They may be applied to one or to more than one aspect of the limb, or the encasement may be complete.

A Rigid Single Splint.—The form known as Dupuytren's is capable of meeting the indications in a small proportion of cases of Potts' fracture. I should limit its employment to those instances in which we have to deal with marked and persistent outward displacement of the foot and but little backward displacment. A chief object of its use being to draw outward the upper end of the lower fragment of the fibula, it passes my comprehension why Erichsen and Stephen Smith should

figure its application with a bandage directly over the break. Hamilton and Druitt show it correctly. The wonder need not be great that students so often mis-apply this splint, when the teaching by illustration is in such marked contrast to the teaching in the text. The importance of keeping the lower bandage below the external malleolus, and of having the pad both firm and thick at a point just above the internal malleolus, are points long insisted upon but constantly needing to be emphasized.

Mr. Bryant figures and advises the application of a single straight wooden splint with foot-piece, for fractures of either one of the bones of the leg. Excepting as a temporary expedient, to be replaced as soon as possible by a more comfortable and efficient dressing, I am unable to endorse this plan.

Under the direction of Dr. Levis, of Philadelphia, a series of perforated and plated copper splints have been prepared and are largely sold in the U.S. Those for the leg are the least satisfactory in the entire set; they are posterior gutters which are apt to fit imperfectly in spite of moulding by the hands. My chief objections to them are, that they do not surround the limb sufficiently to maintain the apposition of fragments, and that they do not keep the foot at a fixed angle with the leg. I show you samples of the various sizes supplied. A series of lateral splints of the same material would be very much better, and could be moulded without difficulty.

*Rigid Splints, in pairs.*are usually applied laterally. Thin straight boards here seem to me inefficient means of support. They do not clasp the soft parts, and in spite of padding they are very apt to press hurtfully upon bony processes. The old and excellent plan of placing two thin boards at the opposite ends of a towel, rolling them in it toward the centre till a space is left between them corresponding to the width of the limb, placing the leg upon this web, stretched so as to form a p erior support, bringing up the sides and securi them after building a bird's nest of padding a ind each bony prominence, can be commended f temporary use. Folded newspapers do well f padding such splints. The toes can be kept fi a pointing by a strip of bandage passed around tl ball of the foot and pinned to the splints upon e side. With such an apparel a patient can often be moved home without the disaster of having his simple fracture converted, on the way, into a compound one. I should be sorry, however, to have one of my own legs, if fractured, left for even a week or two in such a crude and uncomfortable appliance. Once, in consultation, I saw a patient, who died from the effects of sloughing over one malleous, produced by pressure of just such a pair of splints.

American surgical writers, as a rule, do not approve of carved wooden splints, while a goodly number of English surgeons endorse the kind known as Cline's. In America, Pratt's or Day's splints replace the English Cline model. Samples of each form are here presented. I must confess to an early prejudice against these splints derived from association with my old and greatly respected teacher, Frank H. Hamilton. With a considerable assortment of these appliances to choose from and with no hesitation in cutting them in order to secure a fit, one may make them serve useful purposes. On the other hand, if the physician thinks more of the splint than of the patient, he is better without the splint, or the patient is better without him. It must be admitted that a splint, even partly fitted, is better than straight board in the hands of a practitioner with whom the jack-knife is not an instrument of precision.

Rigid Posterior and Lateral Supports.—Under this head I mention fracture boxes and the iron splint used with lateral supports, and known in England as Arnold's or Neville's.

The common fracture box has always seemed to me to be a poor affair. When allowed to rest upon the bed it is especially objectionable. While it may be a safe and conservative practice to teach the average student to use it for the first week or ten days, until swelling has gone down, I should be sorry to have to use it very often myself.

In the old days, when the manufacture of pus, by compound fracture, was considered to be a laudable industry, the bran box had more uses than at present. Where its use is indicated I think it well to have at hand the most improved form.

The one I show you is more nearly like those figured in Wyeth's Surgery or in Stimson's work on Fractures, than any other, but seems to have some advantages over either of these. It was made from directions which I furnished, but for which I make no claim of originality. The idea of having

sides to let down in sections was suggested by John Neil, nearly forty years ago. The sliding floor by which the box may be adjusted to suit any length of leg is a real advantage. By means of Schede's adhesive plaster sling for the heel, the application of which I show you, the suffering of the patient from pressure upon this part of his limb can be relieved, and the risk of having that surgical disgrace, a bed sore over the *os calcis*, entirely obviated.

The iron back splint, with well fitted lateral supports, when suspended, is better than a box. It can be made by any blacksmith; should be 2½ to 3½ inches wide, provided with cross pieces by which it can be swung, cut out at a point opposite the heel, bent at right-angles for the foot, and at an angle of 160° for the knee, and should be of metal sufficiently strong to support the weight of the limb without bending.

This appliance meets the indications excellently well in the treatment of severe cases of fracture of both bones, with over-lapping and over-riding of the fragments. It is not as well known here as it deserves to be, and so I show you a sample.

Without a doubt the most important advance ever made in the treatment of simple fractures was the introduction of plastic material for splint making. As surgeons, we can well afford to toast the memory of that unknown benefactor of his race, who first padded a broken limb with moss and plastered it with clay.

Of plastic splints now in use we may make two divisions. The first of these will include all those softened by heat, or otherwise, and moulded to a part upon which they become firm and unyielding. The second division will include materials liquid at the time of application but subsequently hardening.

Gutta-percha is supplied in sheet form for splint making. I utter no malicious slander when I say that it is not eternal. With rubber goods generally most of us find this out to our cost. It is no better than other plastic material in any respect, and not so good in some. It is non-porous, expensive and short-lived. On the other hand, it can be moulded so as to perfectly fit any part, and no force need be used in shaping it.

Sole-leather, being inexpensive and easily obtained, is a favorite material with many. It should be slowly and perfectly softened in cool water, with or without acetic acid, and can then be adapted to the inequalities of a part almost as perfectly as gutta-percha. One who has time at his disposal, and who by practice has gained some skill in working with leather, can make capital side splints from it. If it be imperfectly softened, the attempt to make it fit down to the exact shape of a limb may be the cause of new injury at the seat of fracture. Exceedingly bad splints are often the result of trying to economize time by using very hot water for the softening of leather.

Felt, and similar poro-plastic material, is supplied in sheets and in blocked forms. The English make is thicker and stronger than the American, and for the leg at least, the models adopted are decidedly the best. Softened by slightly moist heat, they are easily moulded and give sufficient support. I show you samples from leading manufacturers. These materials soon become soft and useless if dipped into hot water whenever a change of shape is required.

Kocker's adaptable splint seems to be a good form of shellac-stiffened cloth. It is, as you see, rather light for use upon heavy limbs.

Wire gauze has long been in use for splints. Its most distinguished advocate at present is Professor Jarvis S. Wight, of Brooklyn. He has been kind enough to send me samples of the best gauze for surgical uses.

The lighter variety has ¼ inch meshes, is made of No. 20 iron wire, and is dipped into molten zinc, so that the wires are coated, and the points of intersection firmy soldered together. So made, the gauze is light, clean, cheap, strong and easily moulded to fit a part.

Mill-board is often referred to as though it is the same thing as, or is interchangeable with, pasteboard or straw-board. It is really a great deal better than either, and is at once excellent for all its proper uses, easily obtained and cheap. It may be used as rigid as ¼ inch deal, or as plastic as felt or gutta-percha. I am in the habit of advising students to stuff a long stocking with oakum and to use it as a model in making plaster dressings and in moulding mill-board. In my hearing, many old practitioners have expressed surprise at the really excellent quality of the splints which were made by moistening the mill-board just sufficiently with hot water, moulding and bandaging it upon the model, and allowing it to dry in position.

Additional strength and an elegant finish can be given to such splints by an outside coating of silicate of soda.

Practice of this kind wastes no time, since, so far as fractures are concerned, it helps to make us independent of the instrument maker.

In the second division, as starch dressings are practically obsolete, I shall consider only silicate of soda and plaster-of-Paris. The silicate I have used for a number of years. As it is not easily obtained here, and may not be familiar to all present, I place a sample before you. From it light, clean, strong and elegant splints can be made, but it is sticky to handle, and dries so slowly as not to give security against displacement by the time the physician is ready to leave the patient. It has been charged with causing extensive sloughing when allowed to remain in contact with the skin.

My personal experience with plaster-of-Paris, in the treatment of leg fractures, includes a series of thirty-eight consecutive cases, put up as soon as reduced, in one or other of the forms of splint presently to be described. I have never completely encased the limb in plaster bandages during the first week of treatment. In no instance was it thought necessary to wait and see if swelling would come on or for it to subside, and no increase in its amount was ever noted after the dressing was applied. The amount of ensheathing callus thrown out in these cases was suprisingly less than that which I have seen in cases treated by other methods. My three first cases were treated by the regular Bavarian splint, made by pouring plaster mud between two layers of flannel secured together down the back of the leg. Becoming dissatisfied with the weight and clumsy look of this dressing, I substituted, as many others have done, layers of cloth soaked in plaster for the plaster alone. Later, the doubled piece of flannel was omitted and layers of gauze or blanket- cut by the measure of the patient's stocking bandaged to the sides of the limb somewhat r the manner suggested by Mr. John Croft, ame the favorite method. Finally I adopted, have now used for four years, the plaster erior splint, essentially, as it was perfected by friend, Dr. Kingman, and others in the Boston hospital. No new principle is involved in aking of this splint. It is not the posterior splint described by Esmarch or by MacCormac. It is not the same thing as a plaster bandage with an inch-wide strip removed down its centre line in front. It differs from, and is better than either of these for the early treatment of simple fractures. I show you samples and photographs of the completed splint, and will now demonstrate the method by which it is made. The materials required are, cotton-wadding, cheese-cloth and plaster-of-Paris. I have lately been substituting scrim, a coarse and strong fabric, for the cheese-cloth as a less number of layers will give equal strength. I have this material here and also a splint made

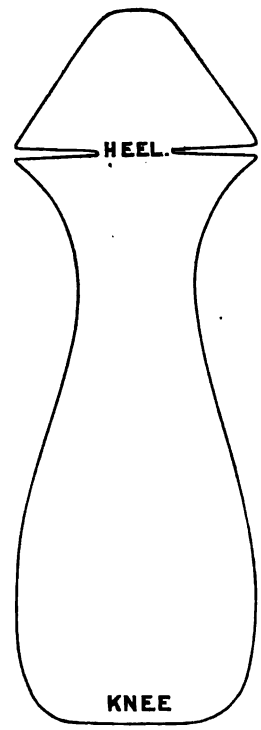

FIG. 1.

from it. The leg is to be bandaged with the batting, which, for the purpose, is torn into strips four inches wide and applied as a roller. Using the sound leg as a model, to save the injured one from movement, a pattern is cut which shall cover in all of the leg excepting a space an inch wide along its anterior aspect. Deep slashes opposite the heel allow the part for the sole of the foot to be brought into a right-angle with that for the leg without forming clumsy folds at the ankle. From this pattern four or five layers of scrim or from six to nine of cheese-cloth are cut. Then

with extension made and the foot properly held, the strips are to be saturated with a cream made by sifting—not stirring—plaster into warm water,

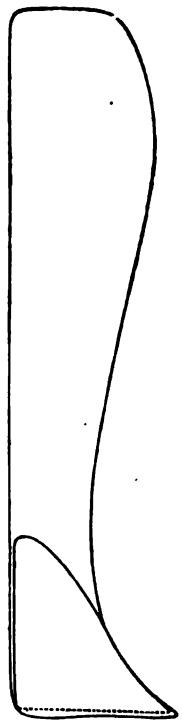

FIG. 2.

smoothed one upon another, applied to the posterior aspect of the limb, interleaved by the slashes at the ankle so as to hold the foot at right-angles with the leg, moulded to the part and then firmly bandaged to it with a cotton roller. He who is to be responsible for the result had better, as soon as this bandage is on, hold the limb in proper position till the plaster sets. To resign the duty into unskilled hands may mean either a deformity or the necessity for a new splint.

No more skill and no better judgment is called for in the use of this method than is needed for successful treatment by any other. A little practice will make almost anyone familiar with its essential details, and the result of its use may often become, as I can testify, a subject for the mutual gratulation of surgeon and patient.

This then is the dressing which I present to your notice as being more nearly the ideal one than any other yet proposed. Permit me to quote again from Dr. Gay: "Properly applied, it is comfortable and efficient, it is self-retaining, it holds the fragments firmly in position, it allows the patient to be moved or to move himself without danger of disturbing the fracture, it permits the parts to be readily examined. Being opened throughout its entire length the bandage accommodates itself to the swelling of the limb without danger of strangulation, it can be applied immediately after the accident, there being no necessity for waiting until the inflammatory stage has subsided. It can be removed and re-adjusted with ease and can be worn indefinitely."

Any and every means by which displacement of the fragments is likely to be prevented, may properly be considered in discussing fixation. Position, suspension, extension and tenotomy become in this way possible factors in fixation. My own experience has been limited to the treatment of cases with the leg in the straight position, or at an angle of not more than 160° with the thigh. Reasoning from the ease with which reduction can at times be effected when the leg is flexed to a right-angle with the thigh, as well as from the comfort given the patient before his fracture is set, by flexing the

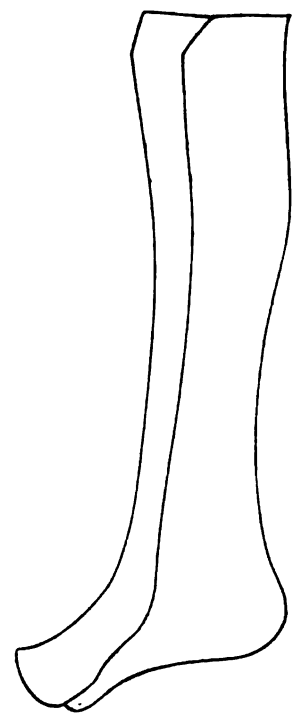

FIG. 3.

injured limb to relax the calf muscles and allowi g it to rest upon its outer side, I am disposed to th' k

favorably of this position continued throughout the stage of consolidation in certain cases. I will leave it for those who have had experience in this matter, to define the cases which are suitable for such treatment. Theoretically, only fractures in the lower part of the leg should be put up with the knee unsecured.

Stanley Boyd, in his late and excellent revision of Druitt's Surgery, makes the curiously inaccurate statement, that in the United States fractures of the leg are usually treated by Buck's method—the American stirrup (meaning by these terms the weight and pulley extension), and that coaptation splints (Cline's) are also used when the fracture is oblique. It would be interesting to know in what small proportion of cases the members of this Society have used the weight and pulley for leg fractures, and in what still smaller proportion they succeeded in making this form of extension honestly efficient in overcoming deformity. It has appeared to me to be so difficult to obtain a purchase on the parts below the fracture for our extending force, without running the risk of ligating the limb or making injurious pressure upon parts like the instep, unfitted to sustain it, that I have not even made trial of this expedient. And before doing so, I shall certainly make trial of one or other of the two forms of double inclined plane which are here presented—the Liston's splint improved by McIntyre, or the wooden apparatus manufactured by Pratt & Son, of Bennington, Vt. When displacement is prevented by keeping the limb at a certain fixed angle, these appliances may prove useful.

Suspension.—I have seldom seen a broken leg doing so well without suspension, that it would not do better with it. One need not pay $20 or $30 for a Salter's swing, when any ordinary blacksmith, if shown how, can for $4 or $5, make one equally good. I show you one which is easily taken apart for convenience of carrying. This I h ə had in use for nearly ten years, and it has p l for itself many times over.

simpler and quite familiar frame is this, which r mbles two small window sash hinged together a g one side. Simplicity and portability can go e ı further than this, and I show you here a bar o ood, 1½ inches square by 2 feet long. Into t upper surface of this and near each end, a s — hook is fixed, by which it may be suspended over and parallel with the injured leg. Into its under surface three or four more screw hooks are fixed, and from them the leg is, by loops of bandage or otherwise, suspended. Dr. Walker, of Detroit, was the first, so far as I know, to describe the use of a bar like this. In practice, we often find that loops of bandage used for the suspension of limbs soon draw into ropes. Hamilton, to obviate this and to distribute the pressure along the limb, suggested the use of broad leather loops. As these are not always at hand, I have used instead starched linen cuffs, one cuff at the ankle and one below the knee, suspended by soft cord or bandage so as not to tear out the button-holes, will answer every purpose. In swinging a limb, it is good practice to have the knee slightly higher than the ankle. Motion at the point of fracture, muscular starting and pain from pressure on the heel, are almost if not entirely obviated by suspension, and yet I feel sure that no small number of limbs are kept lying upon the bed throughout the treatment.

The discussion of tenotomy of the tendo-achilles I leave to others, as I have had no practical experience with it. In very oblique fractures of the tibia, compound or threatening to become so, and in the V-shaped fractures first and best described by Gosselin, this procedure may well commend itself to our consideration.

Compound Fractures of the Leg. — Antiseptic surgery has revolutionized the treatment of this class of injuries and reduced the mortality of cases not demanding amputation, from over 30%, to practically no mortality at all. Volkmann, in 1876, startled the surgical world by reporting 75 consecutive recoveries. Dennis, in 1886, records 150 cases without a death due to septic causes. The very success we now attain brings to us new dangers. Men who formerly would have died now recover, and if not turned out models of manly symmetry, are very prone to listen to the suggestions of Ishmael and of Ananias, and to try and recover damages from those to whom they owe debts of gratitude for life prolonged. In selecting our methods of fixation for these cases, we should bear constantly in mind the fact that we may, within a few months, have to defend in the courts the procedures we adopt.

He who studies to be fertile in helpful resources will not be tied to any routine practice. After testing a considerable number of plans, such as

fenestrated and bracketed plaster splints, the bran box, etc., I have settled upon one method as being the best under all ordinary circumstances. The plan referred to is to make an anterior and a posterior splint, each of eight or ten layers of cheesecloth and each extending from the toes to the midthigh. The anterior one only needs to be removed for the renewal of the antiseptic dressing over the wound. MacCormac gives outlines of good patterns for these splints, and I present for your inspection a complete pair. The plaster posterior splint, described as best for simple fractures, I have used in but a single case of compound fracture. It gave satisfactory support, but not as free access to the wound as would have been required had the latter done badly from any cause.

In conclusion, permit me to submit the following propositions for your discussion :—

1. Plastic appliances are the best for the fixation of fractures of the leg in all their forms and at all stages of their treatment. Exception, certain cases of Potts' fracture.

2. For the early fixation of simple fractures, the plaster posterior splint is the best and safest appliance yet suggested.

3. Next to it should rank side splints made from plaster, soaked blanket, or open-meshed cotton, bandaged on so as to be hinged along the back.

4. In the later stages of all simple fractures of the leg, the complete encasement of the limb by plaster bandages is the preferable plan of treatment.

5. In treating compound fractures of the leg, posterior and anterior splints made of plaster-soaked gauze, are ordinarily the best for fixation. Exceptionally fenestrated or bracketed plaster splints may meet the indications more perfectly. Without considerable practice in the use of plaster, the fracture box suspended may be safer, both for the patient at the time and for the surgeon subsequently.

SOME FEW NOTES ON ABDOMINAL SURGERY.

BY J. ALGERNON TEMPLE, M.D., M.R.C.S., ENG.

Professor of Obstetrics, Gynæcology, and Diseases of Children, Trinity Medical College, Toronto.

Altogether I have opened the peritoneal cavity for various diseased conditions sixty times, with forty-nine recoveries and eleven deaths :

	No. of Cases.	*Recoveries.*	*Deaths.*
Ovariotomy	47	41	6
Abdominal Hysterectomy	1	0	1
Removal of Uterine Appendages	7	5	2
Abdominal Section for Pelvic Abscess	3	1	2
Abdominal Section for Chronic Peritonitis, with Dropsy	2	2	0
Total Cases	60	49	11

It is not my intention to enter into a separate report in each individual case, but merely to make a few brief remarks on some of the more interesting ones. Many of these cases were both interesting and difficult from extensive adhesions.

They were nearly all private cases, though a large proportion were done in the pavilion of the Toronto General Hospital, a building, from its isolation and excellent sanitary arrangements, admirably adapted for such operations. Some were performed at their own homes in Toronto and some in the country. Of the six fatal cases following ovariotomy, the cause of death in two was shock. In both cases the women were old and much enfeebled from the long continuance of the disease, and the only reason I consented to operate at all was at their own earnest solicitation; one was aged 72 and the other 68. In both the adhesions were very extensive, and the tumors large. Both ovaries in each case had to be removed. Many ligatures had to be used, in consequence of the extensive adhesions, and the operations necessarily lasted a long time. In both cases the patients lived only two or three hours, the immediate cause of death being shock. I have concluded that in such cases, one had better not operate; the long duration of the disease, the age of the patient, the emaciated condition, and probably extensive adhesions, not being favorable conditions for recovery.

Two cases were sarcoma of the ovary. One patient lived two, and the other seven days. In regard to malignant disease of the ovary, no attempt at removal had better be made. Death follows rapidly in such cases. After the exploratory incision reveals the true nature of the disease, the wiser plan is to stitch up the wound and leave the case to nature.

One case died of acute peritonitis thirty-six hours after operation. It was a simple unilocular

cyst without a single adhesion. The operation was very easily performed and lasted but a short time. The gentleman who assisted me at this operation was at the time, though I did not know it, himself very sick and died within a few days after from typhoid pneumonia, in fact took to his bed immediately after the operation. How far such a condition of health in my assistant at the time of the operation favored development of peritonitis, I am not prepared to say. But I do think that no operator or assistant should undertake a case of laparotomy unless in perfect health at the time, and I don't think it is going too far to say, it would be advisable to take our own temperature on the day of the operation.

The sixth case lived fourteen days. The abdominal wound healed and no unfavorable symptoms showed themselves till the thirteenth day, when symptoms of septicæmia set in and the patient died of peritonitis. If I had an opportunity of going over the cases again, I would not have to record the first four deaths. Two were too old and feeble for operation, and in two the tumors were malignant—which had better have been let alone.

In one case, some two or three hours after the operation, the patient, during the absence of the nurse from the room for a few minutes, got out of bed, walked across the room and drank about eight ounces of lime-water which she found in a bottle, went back to her bed and never had a single bad symptom, though I certainly looked for nothing short of death. One case gave me a great deal of trouble, in consequence of the very soft and friable condition of the pedicle; I nearly lost her from hæmorrhage at the time of the operation. The ligature cut the pedicle completely through on three separate occasions, so that finally I had no pedicle left to ligate. I consequently stitched it with what sewing women call an "overstitch" along the raw edge of the severed pedicle; the case made a good recovery.

e hysterectomy was for a large and rapidly-
g ing fibroid of the uterus, weighing twenty-two
p ds when removed. I opened the abdominal
c ty with the intention of removing the uterine
a endages, but changed my mind and removed
t uterus and tumor; the patient did remarkably
v l for eleven days, but died from peritonitis a
f hours after its development. I have always

regretted that in this case I did not use a drainage-tube; the result might have been different.

The removal of the uterine appendages was in consequence of their diseased condition. Four of the cases proved to be double pyo-salpinx. Both the fatal cases died of peritonitis.

The three cases of pelvic abscess occurred in young unmarried women, under twenty years of age. The two fatal cases were unfavorable from the outset. They had been ill a long time and their constitutions were much impaired, as shown by their emaciation and debility. One lived three weeks, the other only three or four days, death being the result of exhaustion. Of course, in all three cases I used the drainage-tube and had the abscess-sac washed out several times a day with an antiseptic solution.

The two cases I operated on for chronic encysted peritoneal dropsy, made good and perfect recoveries. After opening the abdominal cavity and removing the fluid, the peritoneum was found to be red, thickened and studded with little miliary-like bodies. I sponged out the cavity and thoroughly cleansed and washed the whole peritoneum, rubbing it all over with a sponge. Both cases made good recoveries. The result of these two cases has given me great encouragement regarding the treatment of such cases in the future, as I believe the method adopted, is the best known to surgical science to-day. In all cases I used the strictest antiseptic precautions. Too much care cannot be taken in this direction. The instruments, sponges, etc., should all be carefully cleansed and disinfected, as well as the operator and his assistants. In all cases the pedicle was ligatured with good stout silk ligature, which had been antiseptically prepared beforehand, and after ligation, dropped into the abdominal cavity.

Regarding the use of the drainage-tube, I think it ought to be used in all cases, where the adhesions have been numerous. Too much care cannot be taken to cleanse out the abdominal cavity before closing it up. I am in the habit of pouring in a pint or more of plain boiled water and removing it by sponges. Moderately hot water is not objectionable; indeed I have noticed that the introduction of hot water into the peritoneal cavity, in cases showing shock from length of operation, is decidedly beneficial to the patient. After the operation, should symptoms of peritonitis show

themselves, I think no time should be lost in re-opening the wound and introducing a glass drainage-tube and thoroughly washing out the cavity with boiled water moderately warm. I have seen the most beneficial results from this procedure, the active symptoms rapidly subsiding. I remove the abdominal sutures on the fourth or fifth day. The dressing of the abdominal wound should be as simple as possible, a little dry iodoform and a piece of antiseptic gauze and dry absorbent wool, and a flannel roller, is all I ever use.

Regarding the use of opium or morphia, I never administer either, unless the pain is so severe as to call for them, which is very seldom. For the first twenty-four hours after the operation I allow no nourishment of any sort, and to relieve thirst, which is as a rule very distressing, I find the injection into the rectum of one or two ounces of warm water, with a little salt in it, acts promptly, and the supervention of vomiting is avoided.

Correspondence.

GONORRHŒAL OPHTHALMIA.

To the Editor of the CANADA LANCET.

SIR,—The manner in which one of my patients contracted this serious affection is worthy of some consideration. A young man came to my office some time ago with an acute gonorrhœa. I prescribed for him. Two days after he returned, the left side of his face being badly swollen, and the left eye almost closed, with a purulent yellow discharge exuding from between the lids, in fact with all the well-marked symptoms of gonorrhœal ophthalmia. Upon questioning him as to the manner in which he had been inoculated, he answered that he was in the habit of using his urine as an eye-wash—(easily procured if not efficient)—having had weak eyes for years. He fully recovered, with good sight in both eyes. Physicians should enjoin strict cleanliness on the part of patients affected with gonorrhœa; they should also caution them against putting their hands to their eyes except when thoroughly cleansed, a precaution which is often neglected or forgotten.

Yours, etc.,

J. M. SHAW.

Mallorytown, Jan. 3, 1889.

SOUTH WATERLOO MED. ASSOCIATION.

To the Editor of the CANADA LANCET.

SIR,—At the regular monthly meeting of South Waterloo Medical Association, held in Galt, Friday, January 5th, the following officers were appointed for the ensuing year: — President, Dr. Lovett, Ayr; Vice-President, Dr. Vardon, Galt; Treasurer, Dr. Sylvester, Galt; Corresponding Secretary, Dr. Hawk, Galt; Recording Secretary, Dr. Thompson, Galt. At this meeting the following resolution was passed: Moved by Dr. Sylvester, seconded by Dr. Vardon—

"That this Association cannot adjourn without expressing its sincere regrets at the departure of Dr. J. Price Brown, who has taken such an active part in the formation of this society, and who has so largely contributed by his culture and ability to promote its usefulness; and while this Association cherish the strongest fraternal feelings toward him, they are but exercising those principles of the golden rule which has been his invariable practice toward every member during his long residence in Galt. We, one and all, wish him the largest measure of success in that new and ample field of labour where his attainments so well fit him for extended usefulness."

Dr. Brown left here about two months ago to study in Detroit, and intends moving to Toronto in a short time.

Yours, "GALT."

Galt, Jan. 14th, 1889.

To the Editor of the CANADA LANCET.

SIR,—Your numerous readers would doubtless be pleased with your excellent wood-cut of Drs. W. S. and F. Black's combined cupping apparatus, breast pump and aspirator, which appeared in the last issue of the LANCET; and having for sometime had one of these instruments in use in connection with my own practice, I can fully endorse your criticism of it. Indeed, I regard the cupping apparatus alone as being an invaluable instrument, for it cannot be doubted by those who have fully tested the efficacy of cupping, that it presents a wider range of usefulness in the local treatment of disease than any other means known to the medical profession. Owing, however, to the trouble connected with its application, and the painful shock incidental to the operation, together with the greater or less danger of injury from the burning fluid, this useful means of treatment has, hitherto, possessed few attractions.

for either physicians or their patients, and has therefore been too often only employed in cases of severe pain, when all other means of local treatment have failed to give relief.

Any apparatus, therefore, which eliminates from the cupping operation its only objectionable features places in the hands of the physician a means of affording relief from a host of neuralgic and rheumatic affections, and of applying the most rapid and effective counter-irritant, revulsant and depletant remedy in cases of internal congestions and inflammations.

As a counter-irritant it is more effective and less painful than blistering, and as a depletant, it presents many of the immediate advantages of general blood-letting, with none of the remote dangers connected with the latter, while it is applicable to the treatment of a vastly greater variety of cases. It may be employed with special advantage in congestion or inflammation of the kidneys, and in pneumonia and bronchitis in all their stages; and the nervous cough so often found in connection with the two latter diseases, which is so trying to the patient, and in which the cough is always out of all proportion to the amount of expectoration, can be readily controlled by a prompt and persistent use of the cups. With the advent of so efficient an instrument as that of Drs. Black, the use of cupping will, no doubt, be widely extended, and its efficacy more generally appreciated.

Yours, etc.,

Saintfield, Jan. '89. JOHN PARK.

ELECTROLYSIS IN URETHRAL STRICTURES.

To the Editor of the CANADA LANCET.

SIR,—In the January issue of the CANADA LANCET I note an editorial with the above heading, upon which I should like to make a few comments.

The *New Englaud Med. Monthly*, for December, ~~ntained a communication from me, entitled, Explanatory notes on Dr. Keyes' Investigation," e *N. Y. Med. Jour.* having declined to publish as its editor expressed it—"one which savors a spirit of depreciation," quite overlooking the ct that Dr. Keyes' article savored much more ongly of the aforesaid spirit than did my letter, which I would refer those who are in a position dge impartially.

If Dr. Keyes "says bluntly that the method is a failure," that is no reason why the results of other eminent men should be lightly set aside, particularly when Dr. Keyes cites eight unsuccessful against Dr. Newman's over two hundred successful cases, not to mention the very satisfactory results recently reported in England and Australia, as well as the United States and Canada.

As for Dr. Thomas' article, I would refer those who are interested, to Dr. Newman's reply in *Jour. of the Am. Med. Assoc'n* for September 8th last. Unfortunately for Dr. T., his battery was of a variety condemned by Dr. Newman for use in stricture cases, so his work was "Love's labor lost." He succeeds admirably also in being blunt as well as somewhat impertinent.

Nothing is to be gained, but very much lost by taking a one-sided view of this as of any other question. We all highly esteem Dr. Keyes for his labors in dermatology and genito-urinary affections, and are compelled to admire the very frank way in which he details his experience, first with the strong current, "galvano-casntique," then with the mild; but his failures, particularly in the latter case, serve a most useful end, for they demonstrate that to stand at the head of one's profession as a surgeon does not necessarily guarantee successful results with electrical methods.

Electricity will hardly reach its proper status till at least the present generation of reigning surgeons shall have passed away. To one prejudiced to the use of the quick sharp cut of the keen blade, the slow, cautious, gentle employment of the smooth-surfaced electrode is a weariness which it is much easier and far more popular at the present time to inveigh against than to endure. Each has its use, each its limitations.

If we are to reap the full benefits of electrical manipulation, the process of training must commence with the student whose mind is as yet unwarped. When he has obtained a comprehensive, intelligent grasp of the subject, he will be in a position to turn his theories to practical account, particularly if he possesses a good share of those inestimable blessings, common sense, patience and gentleness, without which his knowledge will prove unavailing; then we shall hear less of failures with electrolysis and electricity in general.

The sooner our medical schools awake to their responsibility in this direction the better will it be for our reputation as an enlightened, progressive, scientific profession. C. R. DICKSON.

Kingston, Ont., Jan. '89

To the Editor of the CANADA LANCET.

SIR,—In order to render some little service to my fellow practitioners, as well as to elicit the reports of more extended experience in the matter, allow me to narrate, briefly, the results, in five cases, of a novel method of treatment of that intractable disease, whooping cough.

Dr. Keating says:—"As can readily be imagined, a disease which is so universal, so distressing, and at the same time so obscure in its pathology, as the one under consideration, would have in its literature a mass of recommendations for treatment from zealous advocates, based upon theory or experience, as numerous as the authors themselves."

In the face of such an assertion the advocate of another remedy must either have an abundance of "gall" or the endorsation of stubborn facts. However obscure the pathology may be, the history of the disease, in most of its aspects, is not out of harmony with its zymotic origin; although Dolan, in reporting the results of his investigations, asserts that no microbe essential to its existence has yet been discovered.

My own child, aged six, contracted the disease early this winter; for the first two weeks it ran the course of an ordinary attack; at the expiration of that time the symptoms became intensely aggravated. I ran the whole gamut of remedies acknowledged to mitigate the symptoms, but without avail. Atropine, to the verge of poisoning, had no effect; neither had opiates, pushed close on the heels of narcotism. Chloral hydrate, croton chloral, and the rest of them, were tried faithfully, and still the paroxysms increased in number and severity. As a last resort I determined to try the mode of treatment advocated by a French physician, and referred to in a former number of the CANADA LANCET, and that is to act directly on the specific germs in the respiratory tract by means of the fumes of sulphurous acid. At this time the cough occurred about thirty times in twenty-four hours, and was very severe, and the apnœa so prolonged that I feared the possible effects on the meningeal vessels. I selected an unoccupied room, and furnished it in the most sanitary manner possible—bare floor and walls, with nothing in the shape of furniture but a new cot and fresh bed-clothing. In this apartment I hung up her night dress. Early in the evening I burned a good handful of common sulphur in in this temporary bedroom; the fumes were confined for two hours, and then the room aired for an hour. At the expiration of this time, having had no treatment during the day, she entered the room naked and dressed in the disinfected clothing. This was repeated for three nights, and to my surprise, the following day she had but two paroxysms. The treatment was then discontinued, but in about thirty-six hours the cough re-appeared, but not quite so severe as at first. The sulphur applications were resumed for two nights, and after this there occurred in all but one or two mild paroxysms; she rapidly recovered her appetite, all the gastric symptoms having disappeared *pari passu* with the cough.

I could not conclude that the remedy and the abrupt cessation of the disease were only a coincidence; but for corroboration I determined to give it a further trial. In about a week I had a good opportunity, for I was then consulted regarding a family of four children suffering from the disease in a severe form. They were all pale and anæmic and pretty well exhausted. Internal medication I abstained from in order to make my conclusions more accurate, and confined myself to the use of the sulphurous acid. The bedroom was fumigated on four consecutive evenings, and, although the filthiness of the house was a first-class hotbed for germination, in three cases a cure was effected, and the fourth child was much benefitted,—a result that one could not fairly expect to follow any of the commonly used remedial agents.

It would be interesting to myself and many others, I am sure, to have reports from those who have tried the sulphur treatment.

Yours, WM. BRITTON.

Toronto, Jan. 23rd, 1889.

OUR NEW YORK LETTER.

From our own Correspondent.

NEW YORK, Jan. 19th.

There has been a deal of discontent among the students of the University Medical College of the City of New York, about the appointment of a professor in anatomy. The students held meetings and drew up resolutions asking the faculty to appoint their choice to the chair. The faculty

had the vice-chancellor address the students, and explain that the students must leave such matters to the faculty, that they should appoint a man that would give entire satisfaction, and that in doing so they had the whole interest of the students at heart, that when a student entered the College he should trust to the faculty to provide him with the best instruction that could be obtained, and not with the idea that they give them certain lecturers; nor should the students dictate to the faculty. Many students threatened to leave the College, but I am glad to say that many have submitted to the faculty's judgment, and I am sure they will not have cause to regret it, for they have made an exellent appointment in Dr. George Woolsey. The students deserve a good deal of credit in their loyalty to a certain lecturer, and more could be said of their good behavior, when the new lecturer appeared before them.

Dr. J. Williston Wright has resigned from the chair of surgery, not on account of ill-health, as it was rumored, but to give more time to private practice.

Dr. Allen M. Thomas, Physician-in-Chief and Superintendent of the State Emigrant Hospital, has resigned after six and a-half years of faithful and valuable service to the institution. With the permission of the department, I am able to forward you an extract from his letter, not yet published, tendering his resignation to the Commissioners of Emigration, in which he reviews, in a general way, the statistics of the obstetrical department of the institution under his management. I do this as it appears to me a matter of great public, as well as professional, interest, since it shows so conclusively what may be achieved with proper care and wise management in this department of medicine: "The obstetric department has likewise been thoroughly renovated, notwithstanding the authorities at Washington have withheld a large amount of our funds. Unfortunately, the lack of ficient money imposed upon us the practice of rigid an economy in the performance of the rk, and prevented that complete removal of old rs, plumbing, etc., which was desirable. Still have done a very great deal, for we have practlly succeeded in keeping the department in an ellent sanitary condition, and provided it with ient service and every special arrangement ssary for its successful management. Being located in one of the pavilions of the main hospital the health of the department is always *slightly menaced* by the unwholesome condition of the neighboring pavilions, but it is very satisfactory to report no appreciable contamination from that source during the past year. The new provision, which you have very recently allowed me to make, for the care of babies in a separate ward, adds greatly to the efficiency of this service, and amplifies still further our field for doing good. . . .

"At this juncture, let me call your attention to the results of our obstetrical service from the time of its final re-organization, in properly renovated wards, five and a-half years ago. It bears very forcibly upon this question of bettering the sanitary condition of the hospital, and will give you some substantial evidence of the great good that has been done in return for the considerable outlay of time and money you have, from time to time, so wisely made in this department. As these improvements have been more radical and complete than those made elsewhere in the hospital, permit me to suggest, in passing, that the evidence deducted from the facts I shall bring to your notice should be an additional stimulus to you to push forward, as speedily as possible, the similar outlay required to keep up the best possible condition of the other departments. The conditions under which our obstetrical department existed in former years were more or less unavoidably opposed to the obtaining of the best results. For the two or three years prior to 1883, improvements were made in this department as rapidly as the time and circumstances would allow, until, in the latter half of 1883, it reached its complete organization, under the new regime of a physician in charge: a complete and efficient corps of nurses, properly arranged wards, and isolating rooms, and excellent supplies; each for the exclusive use of this service, and all working together harmoniously under an established system of procedure. Before the fulfilment of these conditions, and so far back as I have been able to get accurate knowledge of it from your reports, the rate of mortality of women delivered, varied from 4% to 8% annually, and of still-births, from 5% to 12%. Since August, 1883, we have delivered 544 of 550 children. We have a total of only 17 still-births, and 3 deaths of women, as follows: In 1884, one woman died of exhaustion shortly after confinement, the result of

an advanced disease of lungs, from which she was suffering for a long time previous to her admission. In 1885 and 1886 there were no deaths. In 1887, we had 2 deaths, one from puerperal convulsions and one from puerperal fever, rheumatism and Bright's disease. This case of fever is the *only* death from infectious puerperal disease that has occurred during the past five and a-half years. She came to the maternity ward from one of our medical wards, where she had been under treatment for two months, suffering from rheumatism, pericarditis and acute forms of Bright's disease. At the time her labor began she had a high fever, which was supplemented by all the subjective symptoms of a severe form of puerperal sepsis, of which she died on the fourth day of her lying-in period. During the past year of 1888, we have again had no death. This one case of fever, with all its serious complications, seems scarcely chargeable to any faulty condition of the department. If we had excluded it from our statistics, it would have left us with an absolute freedom of deaths from preventable puerperal cause. The death from consumption and the one from convulsions are so-called accidental or unavoidable cases, which no efforts on our part could avert. After charging the total number of three deaths, as I have done in making up these statistics for the last five and a-half years, it gives the very low mortality rate of only a trifle over ½ of one per cent. of the 544 women delivered. This is in striking contrast to the average 6% mortality rate of previous years. Concerning the record of still-births, which reflects, more or less, directly upon the manual dexterity and special judgment of the medical attendant, there has been a similarly good result achieved. The percentages of still-births for the entire 550 births which we have had, being 3%, in contrast to the average rate of 9% of previous years, when the service was almost entirely in the hands of a midwife."

This is surely a record of which we may be justly proud and of which no degree of modesty forbids a boast. The *Medical Record* published in their last issue the statistics of the maternity division of the Charity Hospital for the last year, which are as follows: 349 confinements, with 3 deaths of mothers or $\frac{8.6}{100}$ per cent.; 13 babies died, 37 still-births.

Ajax.

Reports of Societies.

REPORT OF THE NEW YORK SURGICAL SOCIETY.

Regular Meeting, held Jan. 14th, the President, Dr. Stimson, in the chair.

(From Our Own Correspondent.)

PRESENTATION OF CASES.

Dr. Hartley presented a case showing ulceration and necrosis of the last phalanx of the thumb, and loss of the third phalanges of the little and middle fingers. Patient had had the affection for twenty-three years, and began as a bulbous eruption which gradually had gone on to necrosis of the phalanges. Dr. Star had kindly examined the case and found some anæsthesia of the median and ulnar nerves, and some vaso-motor changes. They both came to the conclusion that the case was one of syringomyelitis, situated at about the seventh cervical or first dorsal vertebræ, and involving the posterior horns and only sufficient of the anterior horns to cause the atrophy. Dr. Lange stated that he had seen two cases of a similar nature, one in which the toes had been involved, and Chopart's operation had been performed with a good result. The other in which the phalanges of the hand were amputated without an anæsthetic.

NEPHRECTOMY.

Dr. Lange exhibited a man in whom he had successfully removed the left kidney for suppurative nephritis on November 21st. The result was especially gratifying, as the patient had been in a very weak condition before the operation. The wound was very large and had now healed except a small superficial granulating surface; it had purposely been kept open and only allowed to unite at the corners. In operating, he always placed the patient on his stomach, and had one assistant hold the pelvis while another made traction on the arm in order to secure more room. In addition to the usual incision along the crest of the ilium, he made one over the tenth rib, and recommended exsection of the eleventh rib to facilitate matters. He had not seen anything of the pedicle after the operation, and thought it had been absorbed and vascularized again.

Dr. Abbe remarked that in a case of suppurative nephritis, in which he had removed the

kidney, the pedicle included a portion of the suppurating kidney, he had simply washed it with antiseptic solution and returned it. The patient died in forty-eight hours, of uræmia, and the autopsy showed that the pedicle had become vascularized.

SEPARATION OF HUMERAL EPIPHYSIS.

Dr. Murray presented a case of a boy, aged 11, who had fallen the distance of twenty feet, and, with extended arm, endeavored to save himself. When seen fourteen days after the accident, the shoulder was much swollen and very painful; the axis of the arm was directed more downwards and outwards than normal. A tumor was felt under the coracoid process, and on rotating the elbow it moved with it. There was shortening as compared with the opposite arm. Diagnosis of separation of epiphysis was made, and a fracture of the external condyle and upper third of the radius was also discovered. All attempts at reduction failed, so an incision was made over the lower fragment, and the lower fibres of the deltoid were found intervening between the fragments. These were divided and about ¾ of an inch of the epiphysis excised. The arm was then easily reduced, the wound dressed antiseptically, and position maintained by means of a plaster-Paris bandage. Good union was obtained, and movement is now very fair, although there are 1½ inches shortening. Dr. Lange stated that he had recently had a similar case where the same difficulty existed, and he had been obliged to cut down and divide the fibres of the deltoid, and that position had been maintained by abduction and extension of the arm.

Dr. Abbe then read the paper of the evening on a case of colo-Colostomy, with remarks on the use of Dr. Senn's plates. He began by paying a glowing tribute to Dr. Senn for his original experiments and investigation in the field of abdominal surgery. Now operations, which formerly occupied over two hours, could be completed in fifteen minutes to half-an-hour, and the result of this, in the prevention of shock alone, was invaluable. The principle of Dr. Senn's method was to do away with intestinal resections in suitable cases, and to substitute an anastomosis of the intestine above and below the seat of stricture or obstruction, and to secure union by means of his decalcified bone plates. The patient was a man, aged 60 years. In November, 1887, he had been operated on for hæmorrhoids, and four months after the operation he began to complain of intestinal hæmorrhage, severe abdominal pain and cramps. In April he entered St. Luke's Hospital for obstinate constipation; a large fæcal mass could be felt in the region of the cæcum, movements took place every five days. Discharged in June, and again entered the hospital in September. No purgative action could be obtained except by the use of enemas, patient became weaker and weaker and subject to attacks of syncope. Under cocaine anæsthesia an incision was made four inches above the pubes, eleven pints of ascitic fluid escaped from abdominal cavity, and on introducing the finger, a large fæcal mass could be felt, which proved to be in the distended cæcum and ascending colon; two silk sutures were passed through the mass, and it was brought up to the abdominal incision and an opening made into it, when about twenty pounds of fæces, oakum, reeds and other foreign material escaped. After the mass was thoroughly cleaned out, the edges were stitched to the abdominal wound, and an artificial anus established. Patient improved rapidly for two weeks, then three quarts of milk were injected into the rectum, and no trace of it could be observed at the fistula; only three pints could be injected at the fistula, and the diagnosis was made that the obstruction was situated at the hepatic flexure of the colon. Six weeks after the operation the patient was anæsthetized, the fistula plugged, and an incision made over the right hypochondriac region. Openings were then made in the transverse and ascending colon by an incision across the transverse muscular fibres of the colon, above and below the seat of obstruction, and Dr. Senn's decalcified bone plates were introduced; the sutures passed through the intestinal wall, and the peritoneal surfaces of the colons brought together; this was further reinforced by the use of several Lembert sutures. On the third day flatus was passed; fourth day some fæces; on ninth, fair movement, and in two weeks a good movement was obtained, and artificial anus was plugged. Patient has steadily improved ever since, and the intention is to shortly close the fistula. Dr. Abbe then stated that the objection to Dr. Senn's plate was that they only allowed an opening the length of one and a-half inches, and that furthermore

they could not at all times be readily obtained; to obviate this he proposed substituting rings made of five strands of heavy No. 7 catgut; these could be made any desired size at a moment's notice. Dr. Abbe then gave some account of his experiments on dogs, in which he had used his rings in place of bone plates, and had obtained good results in all cases. In six to eight hours good plastic union took place, and in forty-eight hours very firm union.

In the discussion which followed, Dr. Meyer stated that he had been present at the operation and remarked at the rapidity with which it had been performed, as the old method of operating took at least two hours. He had recently performed a case of gastro-enterostomy, the operation was long and tedious, the patient died of peritonitis. At that time he did not know of Dr Abbe's rings.

Dr. Lange gave an account of two cases of gastro-enterostomy and one of colo-colostomy in which he thought the rings would have been applicable. He considered Dr. Abbe's rings a great improvement on Dr. Senn's plates, as the latter were difficult to obtain, but that they might be open to the objection of not holding sufficient peritoneal surface together.

Dr. Abbe in closing the discussion, showed that the rings held together at least a ¼ to ½ inch of peritoneum, and when this was reinforced by several Lembert sutures the amount brought together was surprising.

PRESENTATION OF SPECIMENS.

Dr. Stimson presented the following:

Case I. — Gunshot wound of brachial artery, which resulted in a traumatic aneurism and necessitated ligature of the brachial.

Case II.—Carcinoma of uterus in which abdominal hysterectomy had been performed, after previous ligation of the uterine and ovarian arteries. He specially referred to the value of atropia sulphate, 1-75 gr., as preventive of shock. This he had first brought to the notice of the profession some five years ago and attributed its action to a paralyzing effect on the inhibitory nerve. The patient had been subjected to previous etherization for examination purposes and the resulting shock was almost fatal. Before the operation, 1-75 grs. of atropia was administered and the patient recovered from the operation with little or no shock.

Case III.—Two specimens in which gastrotomy had been performed for carcinoma; in both these cases the stomach had been drawn up to the incision and fixed there in order to secure union of the peritoneum and the following day the stomach was opened. Both patients had died as a result of their disease.

NOTES.

For angina pectoris and coronary degeneration Prof. Janeway recommends the following:

℞.—Glonoin 1 % - - - - - - ♏. j.
Kali iodidi, - - - - - - grs. x.
Spts. am. aromat., - - - - - ʒ ss.
Spts. ether co., - - - - - - ʒj.
Sig.—t. i. d.

The beginning of this year has seen the establishment of the Bellevue Training School for male nurses. A magnificent building has been donated for this purpose, by the Hon. D. O. Mills. The institution is probably the first of its kind in America, and is intended to train male nurses in a somewhat similar manner as the females are now trained. The term of service is two years; during that time the pupils receive free board and washing and a salary of $15 per month. Their work in the wards is supervised by experienced female nurses, who are graduates, and besides the training they receive in the hospital, they are compelled to attend a full course of lectures on the various subjects. At the end of their service, if proficient, they receive a diploma, and efforts will be made to keep them supplied with private cases. From all accounts the experiment is, so far, a decided success; the necessary number of applicants have been secured, and the condition of the wards of the hospital has been much improved. As yet it is in its incipiency, but if successful, it will doubtless be followed by similar institutions throughout the country.

Prof. Lusk recently performed cæsarean section for rachitic pelvis, the outlet of which was so narrow that it was with difficulty that a vaginal examination could be made. The child was saved, but the mother, after lingering for about a week, died of asthenia. The autopsy showed that the uterine incision was perfectly healed and no evidences of septicæmia could be observed. Pro-

Lusk has now performed four cæsarean sections, with the record of three recoveries and one death.

For the relief of lumbago, Prof. Janeway, in a recent clinic, advised the use of antipyrine in 10 gr. doses, or 5 grs of antifebrine three times a day, and from the use of these remedies he had obtained the best results. If there was a gouty history in connection with the case, he combined them with colchicum; if rheumatic, with the salicylates.

For the disinfection of suppurating wounds of all kinds, Prof. Phelps uses a saturated solution of hydrogen peroxide. A piece of absorbent cotton is dipped in the solution and then laid on the sloughing surface; this is repeated three times a day until the pus disappears. The peroxide has the advantage, besides being an excellent antiseptic, of being entirely inocuous.

Selected Articles.

B-NAPHTHOL IN ENTERIC FEVER.

In B-naphthol we have found a substance very insoluble, and having at the same time sustained and powerful antiseptic properties. Moreover, it is only toxic in large doses—about eight ounces in the twenty-four hours for an adult of average weight—while forty grains distributed over the twenty-four hours are sufficient to keep the intestinal contents aceptic. But whilst giving naphthol it is also advisable to control the pyrexia that necessarily occurs in the course of typhoid, and so prevent the damaging effects on the tissues and organs of the body of a long-continued high temperature; we should therefore together with naphthol administer an antipyretic, preferably perhaps antifebrin or phenacetin, whenever the temperature rises beyond a certain height, say 102° F.

The drug is given suspended in milk, and a small quantity of pure milk is taken after the dose. The doses must be administered frequently in order to keep up a constant effect, and small doses have also the advantage of not giving rise the pungent after-taste in the throat that naph-)l is apt to produce. To adults it may be ministered in gelatine capsules, or the following mula, which seems the most satisfactory after veral trials, may be made use of: R—B-naphthol xx., Tr. aurantii ʒ ij, Syr. limonis ℥ss, Mucilais tragacanthi ʒ iij, Aq. ad ℥ vj. Dose, ʒ j. aste, however, is practically abolished in most s of enteric fever, and the patients to whom I it in milk make no complaint on this score. Out of seven cases, four, of whom two were boys of twelve, took the drug in doses of 3½ grains every two hours during the whole course of the disease, until the temperature remained normal for five or six days: one boy aged ten took gr. iss instead of gr. iij doses. In two cases the naphthol had to be discontinued before the termination of the fever. In addition antifebrin or phenacetin was administered in the manner stated above. The patients' ages varied from ten to thirty-two years. Taking first the five cases in which naphthol was given throughout the illness, the average duration of fever, reckoned from the first appearance of spots to defervescence, was thirteen days. Diarrhœa was in all slight, and the stools became at once very much less offensive than before naphthol was given, though still retaining the characteristic appearances and alkaline reaction of typhoid evacuations; there was never more than a moderate degree of abdominal distension, this symptom, when in marked degree on admission, showing diminution in a few days. The tongue cleaned early, and there was not the usual degree of dryness of the lips and mouth, nor of the dirty brown fur so often found on the tongue towards the end of the second week and succeeding the period of fever. Enlargement of the spleen was not detected in four of the cases, and only in slight degree in one. There was certainly less pain and tenderness in the abdomen than is generally found, and no albumen was present in the urine.

As to temperature, it followed the usual course, the highest range being from 103.5°–104.8° F. There was a varying amount of bronchitis. One of the boys complained in the third week of the disease of pain in the stomach after his milk, so the naphthol was stopped for two days, and was then continued without further trouble.

It might certainly be anticipated that naphthol in checking the abnormal fermentations taking place in the alimentary canal, would also hinder the normal fermentative process of digestion, and give rise to dyspeptic disturbance. Although I believe that this does not occur in the majority of cases, in the two following instances the use of the drug was stopped on this account. The first patient, a girl of twenty-three, was admitted with irregular rises of temperature ranging from 101°–103.4°, but with no spots or other symptoms of enteric fever. The stools, dark, liquid, and offensive, were rendered at once almost odorless by the administration of naphthol. After eight days she improved, and the temperature became normal during the two following days; it then began to rise, and the typical symptoms of an attack of typhoid developed themselves, the spots appearing on the seventh day from the commencement of the rise of temperature; on the fifth day of this period the naphthol, which had been steadily taken from

the day of admission, was discontinued on account of its exciting pain and vomiting. The vomit consisted of a large amount of very firm hard curd, barely corroded by the gastric juice, indicating perhaps that the action of pepsin was interfered with.

In the second case a relapse occurred eleven days after defervescence from a mild first attack; the patient had been taking naphthol during the whole twenty-three days occupied by the first attack and subsequent apyrexial period, and appeared to be convalescent, until a severe relapse occurred lasting four weeks and nearly proving fatal. On the sixth day of the relapse there was much pain in the lower part of the abdomen, considerable distention and vomiting; naphthol was therefore stopped, and the pain and distention became less, whilst the vomiting ceased on the following evening. The stools became very much more offensive after the drug was discontinued. In these two cases naphthol certainly seemed to excite gastric disturbance; if it had been discontinued for a day or two, it might perhaps again have been given without further trouble, as in the case of the boy mentioned above; but one did not like to run the risk of exciting a return of the sickness. Both these patients made a good recovery. It was disappointing to see in the first case a typical attack of enteric fever developing, and in the second a relapse occurring, in these patients who had been taking naphthol regularly for some time previously, for on the theory on which its use is based, relapse especially should be prevented. The aim of the plan of treatment being to put a stop to the growth and further multiplication of the virus in the alimentary canal, and in this way to prevent constant fresh supplies of toxic material—whether actual micro-organisms or the poisonous products of their life-action—passing into the general circulation and maintaining the morbid process, one chief test of the practical value of the method would be the non-occurrence of a recrudescence of the disease. In these two instances, in spite of the administration of naphthol, the bacillus appears to have maintained its injurious activity unimpaired.

One point came out prominently, namely, that convalescence was more rapid than usual, and that the patients were less reduced in strength than is generally the case. I should like also to call attention to the absence of albuminuria, of any but the slightest degree of splenic enlargement, and of secondary complications. The disinfection of the stools, as shown by loss or reduction of offensive odor, might also reduce the risk of propagation of the disease to nurses or attendants. The author concludes:

(1) That the production of intestinal antisepsis is a rational mode of treatment of enteric fever, and that B-naphthol is a safe and tolerably efficient agent for this end. (2) That by its use in the above cases the duration of the disease was shortened, and the intensity of the symptoms directly arising from profound disturbance in the alimentary canal was lessened. (3) That the tendency to the occurrence of splenic enlargement, albuminuria, and of secondary complications such as boils, abscesses, etc., of purulent infective origin, is diminished. (4) That complete convalescence is more speedily and satisfactorily attained: and that there is less risk of a propagation of the disease to others. Finally we must bear in mind that in some patients naphthol may excite so much gastric disturbance as to prevent its use.—J. M. Clark, in *Practitioner*.

ANTIPYRINE DURING THE FIRST STAGE OF LABOR.

In an article published in this Journal for July 14, 1888, Dr. Egbert H. Grandin, visiting surgeon to the Maternity Hospital, called attention to the use of antipyrine in the first stage of labor. He stated that he had used it for the past year with gratifying results, and that the pains were rendered much less severe, while at the same time the progress of the labor was not interfered with.

In accordance with Dr. Grandin's suggestion, and during his term of service, Dr. T. H. Rockwell, house surgeon at the Maternity Hospital, used it in each case of labor where applicable. The first dose was given when the os was about one-third dilated, except in cases where the pains were very severe from the outset, when it was ordered earlier. Antipyrine, gr. xv, and spt. ammon. aromat., ℥ xxx, were administered every two hours during the first stage for three doses. The temperature and the pulse were noted at the time the first dose was administered, and every hour thereafter until dilatation was complete.

In almost every instance the patient said she felt greatly relieved, and this was evident from her behaviour. In some cases the patient would fall asleep for an hour or so after the first or second dose. These observations were all the more important since the class of patients delivered in the hospital includes many nationalities and social conditions, conspicuous among them being many Polish Jewesses and Bohemians, who, as a rule, are very restless and demonstrative during confinement, and the effect on these was quite noticeable.

Incidentally it was observed that generally the temperature fell from half a degree to a degree and a-half F. The pulse became somewhat more frequent and the respiration slightly increased. Occasionally, if the pulse was rather rapid before administering the drug, it decreased in frequency. Thus an ordinary case taken from the history-book shows:

At 4.45 a.m., patient's temperature was 98.6° F., pulse 100; 5 a.m., patient was given antipyrine, gr. xv, spt. ammon. aromat., ♏ xx; 6 a.m., temperature 98.2°, pulse 68; 7 a.m., temperature 98.2°, pulse 68. Patient was given antipyrine, gr. xv, spt. ammon. aromat., ♏ xxx. 9 a.m., temperature 99°, pulse 64; 10 a.m., temperature 98°, pulse 80.

Case II.—1 p.m., antipyrine, gr. xv, spt. ammon. aromat., ♏ xxx; 1.20 p.m., temperature 98°, pulse 64, respiration 20; 3 p.m., antipyrine, etc., repeated; temperature 97.4°, pulse 66, respiration 19; 4 p.m., temperature 97.4°, pulse 70, respiration 19; 5 p.m., temperature 97.2°, pulse 68, respiration 22.

In order to ascertain the effect of antipyrine in decreasing or lessening the duration of labor, comparative statistics were taken where the drug was not and where it was used. Comparing a number of consecutive cases (of primiparæ) where the drug was administered with a similar number of same cases where it was not, we obtain the following data:

Primiparæ with Antipyrine.

First stage.	Second stage.	Operation.
Hrs. min.	Hrs. min.	
12 20	35	
18 55	1 35	
8 30	2 40	Low forceps.
17 30	45	
6 40	2 45	Low forceps.
16 50	1 40	
10 45	2 45	Low forceps.
5 30	30	
17 00	2 10	Low forceps.
11 55	30	
15 00	50	
10 00	1 35	
8 00	2 00	
Ave. 12 13	1 34	Forceps, 4.

Primiparæ without Antipyrine.

First stage.	Second stage.	Operation.
Hrs. min.	Hrs. min.	
10 00	3 25	Low forceps.
25 15	15	
9 35	10	
9 00	3 00	Low forceps.
11 45	1 15	
20 00	2 35	
12 40	1 50	
3 20	1 10	
15 45	1 20	
3 05	1 05	
26 40	30	High forceps.
11 25	2 45	Low forceps.
6 50	45	
Ave. 12 43	1 33	Forceps, 4.

From the preceding data it is apparent that antipyrine does not increase the duration of labor, but, on the contrary, tends to lessen this stage on an average of about half an hour, while the second stage remains practically the same, and in no case was there any injury done the mother or child.

Thus we see that the results of carefully kept statistics go to substantiate the statement made by Dr. Grandin, namely, that antipyrine very materially lessens the severity of the pains during the first stage without increasing the duration of the labor and without in any way injuring either the mother or child. The drug has never given rise to alarming symptoms, and this immunity is doubtless due to the fact that we have always associated it with a stimulant, and further to the fact that during labor there exists a physiological stimulation of the heart's action.—Dr. Van Winkle, in *N. Y. Med. Jour.*

The Disinfection of Physicians' Clothing.—A simple, ready method is needed—and an inexpensive one as well. The man busy in practice will shirk cumbrous devices. If he has but to hang his suit on a hook, touch a light to a dash of alcohol, and close a door, he is altogether likely to carry out his good resolutions, and sterilize his clothing after each exposure. The galvanized iron closet devised by Dr. Chas. Jewett, which I have used for some months with much satisfaction, meets these indications. Certain modifications suggested by experience are added in this description. Few houses have spare closets which can be kept empty for this purpose, or so placed that fumes escaping would not greatly inconvenience the occupants of the remainder of the floor. But the metal box may be placed in any desired position, as in the yard or under the front steps. The disinfectant used is sulphur. The employment of dry heat at 230° Fahrenheit for one or two hours is impracticable by any simple method which does not require watching. Steam saturates, and might cause shrinking. Chlorine acts only in the presence of moisture, under which condition the colors and texture of fabrics will be affected. Sulphurous acid gas is efficient, inexpensive, and easily produced. It is endorsed by the writers on hygiene, by the national and local health boards, and by the Committee on Disinfectants of the American Public Health Association in their exhaustive report (Dr. Sternberg, Chairman, in *Phil. Med. News.*)

Half an ounce is all that is required by the cubic air space of this closet, but I usually throw half a pound into the bowl to ensure the most complete saturation, and to allow of some leakage. An ounce of alcohol ignites the sulphur readily. More than a small quantity of alcohol should not be used, for fear of the flames leaping up high—although danger of igniting the clothes is obviated by the screen.

The closet should be six feet high, two feet wide, and eighteen inches deep. A shorter closet brings the clothing down on the screen. The screen is made of ordinary mosquito wire gauze. The openings are kept as small as they conveniently may be. Should the upper door not close tightly, a piece of cloth larger than the door can be placed on its inner side and lapped back over its edges, although this has not been found at all necessary in practice. Four hours' exposure of the clothing in this closet is probably sufficient, but the suit may well be hung up in the evening and left over night. It may be worn again in the morning without needing to be aired; in such cases the wearer scents sulphur faintly for some hours, but no one else is conscious of the odor. The cost of this closet is about $13.—Dr. Dickinson, in Brooklyn *Med. Jour.*

SHOCK.—Dr. Cheever first describes this surgical condition, and then continues contrasting primary and secondary shock as follows:

Primary shock; reaction early and perfect, or slow and imperfect. Secondary shock: prostration, nausea, excitement, collapse. Loss of blood from accident or operation, adds to the shock, or complicates its symptoms.

Jar, crushing, mutilation, pain, cutting, bleeding, chilling, all act on the nervous system; react on the ganglia, the heart, the power of breathing, the temperature, the consciousness, the life.

Given then the problem and the phenomena of shock, what particular influences have the operative procedures of modern surgery upon them?

They may be summed up in three points:

1. The effects of anæsthetics.
2. The effects of the operations.
3. The effects of the dressings.

These all belong together and affect each other.

Anæsthetics annul pain, but end in nausea.

Operations under anæsthetics are needlessly prolonged and exhausting.

Modern dressings are tedious and chilling

Have we lessened or added to shock by modern surgery?

Pain and bleeding are less. Slow cutting, nausea, exposure, low temperature are more. Primary shock is diminished; secondary shock is increased.

He then asks and answers the following question:

What can we do to prevent or diminish shock?

(1) Wait for reaction.

(2) Never neglect to calm those suffering mental shock by a cheerful word and personal presence.

(3) Give alcohol, either spirits or wine, a quarter of an hour before the anæsthetic.

(4) Make the anæsthesia short; never begin it until everything is ready; suspend it during less painful dressings. Consciousness returns tardily. We keep up the anæsthetic longer than is necessary.

(5) As rapid an operation as can prudently be done.

(6) As short a dressing as is practicable.

(7) As a cardinal point, avoid chilling the patient.

To promote reaction after the operation:

(1) Persistent and carefully applied dry heat. (Be over-careful about accidental burns.)

(2) Liquid nourishment, combined with a stimulant and a little laudanum, by enema.

(3) Subcutaneous injection of brandy.

(4) Aromatic spirits of ammonia by the mouth. Champagne is sometimes retained when other things are rejected.

(5) Black coffee and brandy, the stimulant *par excellence*, when it can be retained on the stomach.

(6) Quiet: a horizontal, or more than horizontal position; sleep; assurance that all is over, and doing well.

Modern surgery has won three great triumphs:

It substitutes sleep for pain.

It averts secondary hæmorrhage by the animal ligature.

It prevents fermentation by germicidal applications.

Can we add a fourth by stilling the nervous system, and averting, or diminishing secondary shock?—Dr. Cheever, Boston *Med. and Surg. Jour.*

THE PATHOLOGY OF PERNICIOUS ANÆMIA.—The article is a *resume* of a recent contribution by Dr. Wm. Hunter to the *Lancet*. Space is wanting for more than a summary of the results of the investigations, and some short comment upon them. In the first place, he concludes, pernicious anæmia is to be regarded as a special disease, both clinically and pathologically. It constitutes a distinct variety of idiopathic anæmia. 2. Its essential pathological feature is an excessive destruction of blood. 3. The most important pathological change to be found is the presence of a large excess of iron in the liver. 4. This condition of the liver serves at once to distinguish pernicious anæmia, post-mortem, from all varieties of symptomatic anæmia, as also from the anæmia resulting from the loss of blood. 5. The blood-destruction characteristic of this form of anæmia differs both in its nature and its seats from that found in malaria, in paroxysmal hæmoglobinuria, and other forms of hæmoglobinuria. 6. The view can no longer be held that the occurrence of hæmoglobinuria simply depends on the quantity of hæmoglobin set free. 7. On the contrary, the seat of the destruction and the form assumed by the hæmoglobin on being set free, are important conditions regulating the presence or absence of hæmoglobinuria in any case in which an excessive disintegration of corpuscles has occurred. 8. In

paroxysmal hæmoglobinuria the disintegration of corpuscles occurs in the general circulation, and is due to the rapid dissolution of the red corpuscles. 9. In pernicious anæmia the seat of disintegration is chiefly the portal circulation, more especially that portion of it contained within the spleen and liver, and the destruction is affected by the action of certain poisonous agents, probably of a cadaveric nature, absorbed from the intestinal tract.—*Ed. Jour. Am. Med. Assoc.*

THE USE OF TEREBENE.—In the *N. Y. Med. Jour.*, Dr. D. M. Cammann reports a number of cases of bronchitis and other lung affections treated by the use of terebene, from 15 grains to ½ drachm being given three times daily. Of these cases thirteen were of bronchitis, most with more or less pleuritic adhesions. Three were acute bronchitis, ten emphysema, two asthma and bronchitis, ten phthisis, one pleurisy, and one of the third stage of pleuro-pneumonia. Two of these—both cases of acute bronchitis—were cured, one in four and the other in eleven days. Thirty-three cases were improved, most of them markedly, but a few only to a slight degree. Five were unimproved, two of the patients being obliged to discontinue the drug after two or three days, as it produced vomiting. The shortest time the treatment was continued in any case was four days, the longest time six months. The average length of treatment was a little over twenty-six days. Most of the patients took 15 minims, and some as much as ½ drachm, in a mucilaginous mixture, four times daily. In all except three the cough was improved, becoming softer and less frequent. In twenty-six the quantity of the expectoration was lessened, in four it was unchanged, and in two it was increased. The latter were under treatment only one week, and it was found in some of the other cases that the expectoration was increased for the first few days and afterwards diminished. In seventeen cases the expectoration became thinner and more watery; in six it was no thinner. In the other cases no note was kept in regard to this point. In those troubled with dyspnœa it was diminished in eight. The patients noticed an increase in the urine in nine cases; no increase was noticed in fifteen. In many of the cases the appetite improved. In two cases the terebene caused vomiting, in two nausea, in one dizziness and nausea, in two dizziness. These symptoms usually ppeared when the dose was reduced. It is eficial in affections of the bronchial mucous nbrane, both acute and chronic. It relieves dyspnœa of emphysema, it is readily borne by stomach, and it seems to have a resolvent ac- on pleuritic adhesions.—*Therap. Gaz.*

REATMENT OF POST-PARTUM HÆMORRHAGE—In resence of sudden and abundant hæmorrhage *post-partum*, Dr. Ségournet administers powdered ergot, freshly prepared, introduces the carefully disinfected hand quickly into the uterus and compresses the aorta (which is easily recognized by its pulsations) between the fingers and the vertebral column. The hæmorrhage is arrested at once Pressure is maintained as long as possible, and is not relaxed until an aid compresses the aorta through the abdominal walls and shuts off the circulation below. If hæmorrhage does not recur the hand is not introduced into the uterus again, but the compression of the aorta through the abdominal walls is maintained for some time, occasionally even an hour or more. The advantages of this method are that it requires no instruments, which are so likely either not to be at hand or to be out of order, and that it is easily and quickly applied, and perfectly trustworthy.—*An. de Gynécol.*

COCOANUT AS A VERMIFUGE.—Referring to the recent statement of Professor Pariso as to the vermifuge properties of the cocoanut (*Pharm. Journ.*), a correspondent of the *Times of India* writes that the cocoanut has been used as a vermifuge in India for probably forty generations by the beef-eaters of the country, and is so well known there as a means of expelling the fat worm that he cannot conceive how information of this fact has not reached England before. When properly prepared and intelligently administered, so says this writer, the cocoanut is equally efficacious with male fern oil, kousso, pomegranate-root, or turpentine, while it is as pleasant to the palate as they are offensive. He is of the opinion that this is only one of the many valuable Indian remedies that would become better known to the European practitioner if an edition of the Pharmacopœia of India were published, properly brought up to date.—*Pharm. Journ.*, 1888.

ALBUMINURIA IN RELATION TO LIFE INSURANCE.—At the recent annual meeting of the Association of American Physicians, held at Washington, the subject of renal disease was dealt with by several members from various points of view. One of the most practically interesting papers was read by Dr. James Tyson, of Philadelphia, and referred to the significance of albuminuria in respect to life insurance. The writer pointed out that in certain cases candidates presenting this symptom might be accepted, although he would draw the line rigidly at those who, in their general health, in the fact that no casts accompany the albumen, in the small quantity of the latter, and the high specific gravity of the urine, present no evidence of structural kidney disease. When the specific gravity is above 1020, the assumption is that the albuminuria is functional; if it be 1010, it would be hazardous to accept such a case, however good his health may be, even in the absence of casts.

Of course, evidence of cardiac hypertrophy with albuminuria would suffice to exclude the candidate; nor if a patient suffering from albuminuria were over forty years of age should he be accepted unless he has long been under observation. The subjects of true gout were also recommended as unfit, seeing their liability to renal disease.—*Lancet.*

THE DIETARY OF ASTHMATICS.—Asthmatics, from necessity, become spare feeders, and are often very thin. In so many cases a heavy meat meal is followed by an attack that a restricted dietary is inevitable. To certain asthmatics certain articles are specially injurious, while to others they are not so.

The dietary which suits most asthmatics best is that which limits them to two meat meals, viz., breakfast and lunch or early dinner, and restricts their food for the rest of the day to liquids, with only bread, toast, or buscuits as solids; the great principle being that the asthmatic should retire to bed with gastric digestion quite complete, and thus preclude any presure upward against the diaphragm from flatulent accumulations in the stomach. Where there is much dyspepsia, and especially where flatulency occurs immediately after meals, it is advisable to omit sugar and starch from the dietary and to avoid potatoes, and in these cases a little alcohol in the form of whiskey, or brandy and water, should be taken with lunch or dinner. Coffee is generally a suitable beverage, and should be taken at least once a day, black, as it distinctly lessens the spasm without rendering the patient sleepless, whereas tea, though it is a product of the same natural order of plants, acts in a different way and often increases the neurosis. Various extracts, such as Brand's and Valentine's, and strong beef-tea, especially when taken warm, are excellent, as they are easily assimilated, and enable the patient to get over the asthmatic attack without great prostration.

It need hardly be added that all articles of food which are in themselves more or less indigestible, such as pastry, pickles, uncooked vegetables, salads, garlic, and fruit, except when perfectly ripe, and we may add cheese in its various forms, and richly dressed or highly flavored dishes, are to be strictly avoided.—*Dietetic Gaz.*

TREATMENT OF PNEUMONIA BY DIGITALIS.—M. Petresco has treated a large number of cases of acute pneumonia with great success by the administration of four grams of digitalis leaves in infusion every half hour, by mouth. The infusion is prepared with 4 grams of digitalis leaves to 200 grams of water and 40 grams of syrup. The disease is generally checked in three days. The fever and all the physical phenomena, local as well as general, disappear rapidly. In spite of the large doses he has never seen poisonous effects, tolerance having been incontestably proved by 577 observations. By this treatment it is claimed that the mortality of pneumonia has been reduced to 1.22 per cent.—*Lyon Med.*

CAPILLARY ASPIRATION OF THE BLADDER.—This was one of the subjects brought before the Society of Naturalists, at Cologne, by Drs. Rosenberger, of Wurzberg, and English, of Vienna. The first speaker remarked it was a procedure warmly recommended by Lücke, and he wondered that it was so little practised. The operation was easily performed. Any kind of aspirator could be used, and a fine needle no thicker than an ordinary knitting needle passed into the bladder above the symphysis in the linea alba. When all the fluid was evacuated the canula should be removed, with a sudden jerk. By this means no bleeding took place, especially if care was taken to keep the sides of the canal together until they adhered. Of course all antiseptic precautions should be made use of. In old people it was sometimes necessary and frequently useful. It often happened that when aspiration had been performed two or three times the patient could micturate naturally, or a catheter could be introduced, when before such a thing was impossible. It was a procedure generally indicated in retention of a passing character, and when catheterization set up violent hæmorrhage from the urethra. The pain from the operation was slight, frequently less than was caused by introduction of a catheter. Dr. English, of Vienna, said he had never practised capillary aspiration of the bladder, and criticised the procedure adversely as both unnecessary and dangerous.—*Med. Press and Circular.*

TANNIN IN PHTHISIS.—Dr. de Viti Demarco, of Otranto, has found that large doses of tannin will reduce the temperature of phthisis, and will sometimes produce a most beneficial effect on the course of the disease. He prescribes it in the form of a pill, to be taken every two hours. Each pill contains seven grains and a half of tannin, with a quarter of a drop of creasote. In one case, where there were cavities in the left apex, the whole of the lung being affected, the temperature rising as high as 40° C. at night, apyrexia was obtained in twelve days, and at the end of three months the general condition was much improved, the cough and expectoration being greatly lessened, the weight having increased, and there being an entire absence of fever. Notwithstanding the prolonged use of the tannin, no unpleasant symptoms were produced by it.—*Lancet.*

ERGOT IN INCONTINENCE OF URINE IN CHILDREN.—A writer in the *Medical Analectic* says that he has been using for many years the fluid extract of ergot in the treatment of incontinenc

of urine in infants and children, and almost regards it as a specific for the disease. He prefers to give it simply, and to treat separately any conditions of the patients that may require therapeutical aid to correct those states of physical debility which either predispose to incontinence of urine or aggravate its presence. He gives to an infant from one to three years old, five to ten drops; and to a patient from three to ten years, ten to twenty drops every three hours. Few children object to its taste, and it should be continued uninterruptedly for two or three weeks, and resumed if the disease should return, in which case the doses ought to be gradually increased.—*Med. Rec.*

PUERPERAL ANÆMIA, AND ITS TREATMENT WITH ARSENIC.—After a brief reference to the literature of the subject, the writer gives in full the history of a case which did well under the plan of treatment indicated. He then continues:—To Bramwell, of Edinburgh, the profession is indebted for pointing out the almost specific action of this drug in certain cases of pernicious anæmia. The statistics collected by Padley a few years ago, show forty-eight cases treated without arsenic, of which forty-two died. Of twenty-two cases treated with arsenic, sixteen recovered, four died, and two improved. Within the past few years, numerous observations have shown the powerful effect of arsenic in certain cases. Unfortunately, we do not yet fully understand why, in some instances, the drug should be well borne and prove successful, while in others the patient continues in the progressively downward course. That the cases which we group as pernicious anæmia are very varied is now recognized by all writers on the subject. It is not to be expected that when the gastric tubules are atrophied, arsenic can be curative. We need a careful study of those instances in which the drug has proved successful and of those in which it has failed. To judge from therapeutic test alone there must be a very deep-seated difference between the two classes. I know of nothing more remarkable in practical therapeutics, nothing so resembling specific action (unless we except iron in chlorosis and quinine in ague) than the rapid recovery of profound anæmia under this drug. As a rule it is well borne, and should be given, as Bramwell advises, in increasing doses, beginning with five minims, and rising gradually o twenty or thirty, three times a day. Puffiness f the eyelids, œdema above the eyebrows, vomitıg or diarrhœa, indicate that the drug should be uspended for a time, or the dose reduced. It is ıteresting to note that the existence of vomiting r diarrhœa does not, however, contraindicate the nployment of the medicine, as in the case here ported. These symptoms seemed to improve, r a time at least, when the arsenic was first ven. If the Fowler's solution disagrees, arsenious acid may be tried. I have known it to be well borne when the liquor arsenicalis disturbed the stomach. The drug may be given hypodermically, but in these instances of profound anæmia the tendency to hæmorrhage is so marked that the punctures may become hæmorrhagic. I have known considerable subcutaneous extravasation follow an injection. The point of the greatest importance is the fact that the medicine must be given in increasing doses, and for prolonged periods. I find practitioners express great surprise when they hear of doses of Fowler's solution, of fifteen, twenty, and twenty-five drops three times a day. There is, I think, but one rule in the matter; give the drug cautiously until physiological effects are produced. The tolerance of the system for arsenic is well known. I have never seen serious consequences from its careful administration. Young persons, as a rule, take it better than adults. In an instance of pernicious anæmia which I reported a few years ago, the patient took twenty minims of Fowler's solution three times a day for weeks, with the most satisfactory results. In post-partum cases recovery is always slow. It may be many months before perfect health is restored. It is well to intermit arsenic for a few weeks; but the drug should be given at intervals for many months, even when the health is apparently re-established, as there is a well-recognized tendency in these cases to relapse.—Prof. Osler, in *Bost. Med. and Surg. Jour.*

THE DIRECT APPLICATION OF COPAIBA IN GONORRHŒA.—Having read, some time ago, a short article by Dr. I. H. Stearns, of Mansfield, Mass., on The Abortive Treatment of Gonorrhœa, in which he advised the direct application of copaiba balsam, I decided to act upon his suggestion. Hence, the first case that presented itself to me was subjected to that treatment. It was a young man, who, six days previously, had been exposed to contagion. On the evening before I saw him he had noticed slight burning on urinating, and the next morning the burning had increased, and a thin, yellowish discharge had appeared. On examination, I found the meatus reddened. I smeared a No. 23 steel bougie with balsam of copaiba and introduced it down as far as the membranous portion of the urethra and allowed it to remain for six or eight minutes. At noon of the same day he noticed that the scalding, on making water, had diminished, and on the following morning there was no trace of a discharge. The second morning I again introduced the balsam-smeared bougie. A third application was made on the fourth day, although he considered himself cured. Four or five weeks after he called on me about another matter, and assured me that no symptom of gonorrhœa had appeared since. I have tried the above plan of treatment since in eight cases

of gonorrhœa in the first stage, and in all but one obtained like results. The exceptional case was that of a young man, who insisted upon drinking large quanties of beer and having intercourse with his mistress on the second night after beginning treatment. In gleet I have obtained no beneficial results at all. This I attributed to the fact that, in the majority of cases, a gleet is kept up by a stricture. When the stricture is cured the gleet disappears; all other treatment is but palliative. It seems but natural that copaiba would manifest its curative properties to more advantage when applied directly, than when compelled to travel through the system first; for, when taken by the stomach, the volatile oil passes off by the lungs, while the copaivic acid is excreted by the kidneys. There is usually a slight burning sensation experienced immediately after the passage of the bougie, but this passes off in a few minutes. Of course the ordinary restrictions in eating and drinking must be observed.—Dr. Rively, in *Med. Reg.*

TUBERCLE BACILLI IN THE SWEAT OF PHTHISICAL PERSONS.—Dr. Eugenio di Mattei reports, in the *Archive prio le Scienze Mediche*, a number of experiments made to determine the possibility of transmitting tuberculosis through the medium of the sweat. In the first series, in which the sweat was taken from the skin without any precautions, numbers of tubercle bacilli were found. In the second series the author cleaned carefully a portion of the integument, covering it subsequently with a glass to prevent possible contamination from the air, and then examined the sweat excreted on this part. Here no bacilli were found, showing that the micro-organisms found in the first instance were deposited upon the skin from the surrounding atmosphere, and that none passed through the sweat-glands.—*Med. Rec.*

INCONTINENCE OF URINE IN CHILDREN.—Dr. J. E. Clark, one of Brooklyn's most celebrated physicians, and President of the Medical Board of of St. Peter's Hospital, stated to us recently, that he had been almost universally successful in treating this unfortuuate malady by dilating, once in a while, the urethral canal with the ordinary sound. Our experience has convinced us of the value of this method.—*Am. Med. Dig.*

DR. ESGUIVE, Colonization physician to the Paris-Lyons-Mediterranean Railway, Bon-Medja, France, March 28, 1887, says: "I tried BROMIDIA (Battle) on two cases of insomnia, which I had already treated for some time, with a mixture of equal parts of bromide of potassium and chloral. I noticed that hypnotic results were produced with much smaller doses of BROMIDIA than of the mixture of bromide and chloral. In a large number of cases it is important not to push too far the quantity of bromide of potassium. On this account I believe BROMIDIA is destined to be of real value, particularly in insomnia of cardiac origin, and I deem it vastly superior to the simple mixture of bromide of potassium and chloral."

LEUCORRHŒA IN CHILDREN.—In cases of leucorrhœa in children, where injections cannot be used, Professor Parvin recommended pencils of iodoform (containing three or four grains each), to be introduced into the vagina, or—℞. Argenti nitratis, gr. v; aquæ, f ʒ j. M. Sig.—To be dropped between the labia.

HEADACHE.

	FORM	TREATMENT SUGGESTED.
1.	Anemic.	Amyl., Bella., Fe., Menthol, Quin.
2.	Bilious.	Ammon. Chl., Hg., Mag. Sulph., Podoph.
3.	Cardiac.	Cactus. Dig., Glonoin., Strophanth.
4.	Catarrhal	Acon., Potas. Iod., Puls., Duboisine.
5.	Cerebral Softening.	Anodyne, Ergot.
6.	Cerebral Tumor.	Ergot. Potass. Iod.
7.	Cinchonism.	Bromides, Iodides.
8.	Congestive, active.	Acon., Erg., Morph., Pod., Salines.
9.	Congestive, passive.	Aq. ferv., Dig., Potass. Acetat.
10.	Climateric.	Cimicif., Ver. Vir., Sulphur.
11.	Constipation.	Aloin. Cascara, Hg., Nux Vom., Pod.
12.	Diabetic	Potass. Brom., Valerian.
13.	Dyspeptic.	Bryon., Guarana, Nux Vom., Sod. Salicyl.
14.	Fevers.	Acon., Antipy., Did., Gels., Ver. Vir.
15.	Gouty.	Colch., Salicyl.
16.	Hemicrania.	Antipy., As., Can. Ind., Dig., Gels.
17.	Hæmorrhoidal.	Cascara, Sulphur.
18.	Hysterial.	Asaf., Camph., Hyos., Val. of Zn.
19.	Idiopathic.	Caffeine, Guarana, Bromides.
20.	Inebriate.	Bromides, Camph. Monobrom., Chloral, Hyos., Pilocarp.
21.	Migraine.	Antip., Brom., Ergot, Glonoin. Menthol.
22.	Meningeal.	As. et Op., Frigus. Gels.
23.	Menstrual.	Am. Mur., Antipy., Gels., Pierot., Viburn.
24.	Malarial.	Ars. et Bell., Gels., Quin., Am. Picr.
25.	Nervous.	Bromides, Gels., Guarana, Strych., Zinc.
26.	Neuralgic.	Antipy., Caffein., Gels., Phosp., Quin.
27.	Optical.	Correct the vision. Rest.
28.	Ovarian.	Am. Mur. Gels., Viburn.
29.	Periosteal.	Potass. Iod.
30.	Periodical.	Ars., Can. Ind., Gels., Quin.
31.	Plethoric.	Alkalies, laxatives.
32.	Rheumatic.	Colch., Pot. Iod., Salicyl.
33.	Sick.	Caff. Citrat., Guarana, Nux Vom., Sod. Phosph.
34.	Syphilitic.	Hg., Pot. Iod., Stillingia.
35.	Toxemic.	*p. r. n.*
36.	Uremic.	Elater., Morph., Pilocarp., Podoph.
37.	Uterine.	Bella., Cimicif., Viburn.
38.	Worms.	Salicyl., Vermicides, Vermifuges.
39.	Zymotic.	*p. r. n.*

BENJ. EDSON, M.D., *in Medical World.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address,* DR. J. L. DAVISON, 12 Charles St., Toronto.

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AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

TORONTO, FEBRUARY, 1889.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

DIDACTIC LECTURES.

Our valued contemporary, the *Canadian Practitioner*, in the January number, is "surprised" at the course taken by this journal, in opposing very strongly any reduction in the full course of didactic lectures, now, as we think very wisely, required by the Medical Council of Ontario, on the principal subjects, primary and final. We would be even more "surprised" could we, for any reason whatever, advocate the slightest abridgment of this very essential part of medical study. Our contemporary asks, "Shall students be compelled to listen twice to the same set of didactic lectures?" We answer without the least hesitation, and we believe that the vast majority of both good students and teachers will endorse our answer, that two courses are not too many on any important subject; and further, we add, that no good tercher gives just the same set of lectures twice. They are, or should be, so modified and improved every year, as to be full of interest. And we venture the opinion that nine out of every ten lecturers, whose teaching powers amount to anything worthy the name, will bear out the general opinion of teachers and students, that the first course is of far less value to the student than the second, for the first course lets him know how to profit fully by the second course. And that after having attended this he can read at home, and receive clinical instruction at the hospital to advantage, for he knows how to read with profit, and can understand the cases he sees. We care not how much the practical instruction given is extended—the more of this the better—but we feel convinced, and that from an experience of over sixteen years, actual teaching in Toronto, that any curtailment in the number of lectures now given in all the important subjects, would be a step in the wrong direction. Believing this, we can never advocate the views advanced by our esteemed contemporary, and again repeat, that it would be an evil day for medical education in Canada if such change should by any possiblity be made.

We had almost omitted to correct an error into which the *Canadian Practitioner* has fallen, in quoting "McGill University" as in favor of reducing didactic lectures to a single course on each subject. We have it on authority, that whatever may have fallen from any individual member of the Faculty, in giving his own views, the Faculty, as such, has not only come to no decision, but has not, as yet, even considered the matter.

TREATMENT OF PRURITUS.

There is no more troublesome disease, or rather symptom, for the general practitioner than pruritus. Correspondents to the *Lancet* send the following suggestions, which will be interesting and useful to our readers:—

H. W. J. suggests that an undiscovered diabete or nflammatory or cystic disorder of the cervix uteri wil. often render a pruritus vulvæ intractable. Barring these important causes, he should try the fifty per cent. ointment of ichthyol with lanoline. Surgeon, presuming there is no gout or uterine disease, recommends a mixture containing sod. bicarb., mag. sulph., and inf. gent:, to be taken three times a day in sufficient quantities to keep the bowels moderately open. Also the following lotion, to be applied on linen cloths three or four times a day:—℞ Liq. plumbi, 1 drachm; pulv. boracis, 3 drachms; zinci. oxid., 2 drachms; glycerine, 2 ounces; water to sixteen ounces. No alcoholic drink to be taken. Mr. Henry Ryley (West Brompton) has during a practice of thirty years found the disease yield to an outward application of the following:—Liq. plumbi, liq. op. sed. (Battey), ung. cetacei, and pure cream from the cow, of each one ounce. The ingredients must be well

mixed and dispensed in a wide-mouthed bottle, to admit the fingers. Mr. J. F. Briscot suggests a systematic examination of the external and internal organs of generation for tinea, animal or vegetable, vascular caruncle, and other possible sources of irri tation within the vagina or rectum, and an ex amination of the rectum. Dr. Thursfield (Leamington) asks if cocaine, either as a lotion or an ointment, has been tried. He suggests that the condition of the os and cervix uteri be ascertained, and that coffee be forbidden. Mr. J. C. Balfour (Redbourne) suggests that relief may be obtained by bathing the parts with a solution of boracic acid in water, or a lotion composed of hydrochlorate of morphia, hydrocyanic acid, and water. Bromide of ammonium given at night as a sedative has also been found useful. Mr. H. E. Rowell (East Rudham) suggests, if no cause for the disease can be found, great cleanliness, and a lotion containing glycer. boracis, 2 ounces; water to 6 ounces. He also observes that in the 1888 edition of the "Univesal Merdical Sciences" a sitz bath of hot salt water (from one to five per cent.) just before retiring and an ointment of cocaine oleate and lanoline to be applied twice a day, are recommended by Piffard. Mr. Percy Newell (Ipswich) recommends a careful regulation of the diet and the use of vinolia. The following lotion is, he says, recommended by Dr. Atthill, in his work on "Diseases of Women":—Acid. carbol., 20 grains; tinct. opii, 4 drachms; acid hydrocyan. dil., 2 drachms; glycerine, 4 drachms; water to 4 ounces. Mr. J. Wrixon (Watford) says that he has found the following prescription effectual:—Ung. plumb. hyd. nit. ox., and acid. borac., of each 2 drachms; cocaine (1 to 30), ½ ounce; ft. ung. This is to be gently rubbed on night and morning for a month, and the parts bathed in a lotion composed of two teaspoonfuls of borax to a pint of cold water. A strong infusion of green tea is also useful. R. W. W. suggests a trial of the following lotion:—Liq. ammon. acet., 1 drachm; acid. hydrocyan. dil., 1½ drachm; inf. tabaci to 8 ounces. The parts subject to irritation to be bathed two or three times a day. The inf. tabaci to be made by infusing sixty grains of bird's-eye tobacco in boiling water for a quarter of an hour. Ixion recommends vinolia, which, he thinks, will allay the irritation at once. The preparation is said to consist of zinc, antiseptics, etc.

TESTS FOR HYDROCHLORIC ACID IN THE GASTRIC JUICE.

Not long ago we called attention in an editorial note to the fact, then said to be established, that the gastric juice of persons suffering from cancer of the stomach contains no hydrochloric acid. This conclusion was arrived at by many competent observers, especially among the Germans. It has been lately confirmed by M. Labord, Vechaieff, of St. Petersburg, *(Jour. de Méd. de Paris)* has decided that the absence of the acid in the stomach and œsophagus in cases of cancer is the rule and that its presence is the exception. He used a number of tests, some of which we give, hoping they may prove of value to those of our readers who may be in doubt as to cases of gastric trouble, as well as to the most approved recent methods of testing for Hcl.

1. Aqueous solution of tropeoline. This solution, which is yellow, becomes dark cherry-red when in contact with a liquid containing $\frac{1}{10000}$ part of hydrochloric acid.

2. Methyl violet. This becomes blue with a solution containing $\frac{1}{10000}$ part of Hcl.

3. Congo paper. This also becomes blue when immersed in a solution of Hcl similar to the preceding.

4. A mixture of three drops of a saturated aqueous solution of carbolic acid. This mixture takes a yellow color with lactic acid, but becomes colorless in the presence of free hydrochloric acid.

5. Günzburg proposes the following, which must be preserved in the dark:

Vanilline	1 gram.
Phloroglucine	2 "
Alcohol.	30 "

By gently warming the liquid to which the reagent is added, a crimson red color is produced if the liquid contains Hcl, even in the most minute quantity, no change is produced by the presence of lactic acid. Germain Sée speaks very highly of this last test, while M. Laborde thinks the Methyl violet is equally as reliable as this last.

RICH DISPENSARY PATIENTS.

A note to the *Br. Med. Journal* gives the ca of a man, who, "owner of twenty cabs, four var a greengrocer's and dairy combined, has had

medicines from a dispensary at sixpence per bottle for several months past." This condition of affairs is not, by any means, confined to London, or the old-world cities. Here in Toronto, patients come to the extern at the General Hospital for free advice and medicine, who, if we may judge by their appearance, are well able to pay for both. Females, who would be indignant if not called "ladies," clad in furs, neither scant nor inexpensive, with nodding ostrich plumes, silks and satins even, present themselves unblushingly, while many a poor wretch, having still pride enough to abhor the position of a mendicant, shuns the hospital and dispensary, and thus wants the much-needed advice and medicine for which he is truly unable to pay. It seems to us that a little judicious discrimination by members of the extern staff would be conducive to a better state of things in this department of the hospital. In only one case do we remember having seen the doctor question a patient's ability to pay, and when it was found that said patient was by no means a pauper, he was very properly sent for advice where he would have to pay for it. If patients can afford to wear ostrich feathers and gold bracelets, they can assuredly afford to pay for the services of a profession which does more charity work than any other body of men in the world.

PRIVATE HOSPITAL.

We are pleased to be able to announce that Dr. Temple is about to open a private hospital for the treament of medical and surgical diseases of women. This is a want long felt in both the City of Toronto and throughout the Province of Ontario. When we regard the great success that has attended such institutions in England, in the hands of such men as Mr. Lawson Tait and others, we feel it but right they should be encouraged. Many patients, especially among the better classes, are averse to entering a general hospital although the depart- n it for diseases of women is entirely separate T the profession must be apparent the great a antages and better prospects which the private h pital affords the patient. The doctor has secured a omfortable building and fitted it up with all n lern improvements and the best of sanitary a ngements. He has also secured, as matron, a v competent nurse, a graduate of the Nurses' T ing School, Toronto, and who has been for a long time in the Woman's Hospital, New York, and we are sure patients coming from a distance will find in the institution every home comfort. From the doctor's past experience in the treatment of the various diseases of women, and his long connection as Professor of Gynæcology in Trinity Medical College, he has had abundant opportunities of perfecting himself in this special department. It is expected this institution will be open for the reception of patients by the 1st February, and with Dr. Temple as its head, with his able assistants, we may confidently expect good work. We wish the enterprise every success.

PORTRAIT OF DR. JOSEPH WORKMAN.

One of the most pleasing events which have ever marked the history of the Toronto Medical Society, took place at a recent meeting of that body, when the members presented Dr. Joseph Workman his portrait. The venerable Dr. has the admiration, and we might almost say love, of all who know him. No man perhaps, in the profession to-day, stands so high in the esteem of his brethren. His great attainments and the noble career he has so long pursued are well known, not only to the profession of which he has been for so protracted a period, an ornament, but also to the laity generally. We heartily wish the veteran Dr. God-speed and trust that his valuable life yet may be spared for years, to continue the grand work in which his energies have never flagged, nor his devotion grown cold.

On the Necessity of Sterilizing the Urine of Typhoid Patients.—It is a matter of great importance, and one which is perhaps not sufficiently attended to, that the urine of patients suffering from enteric fever should be disinfected, as well as the excreta. Many observers have doubted the presence of the bacilli in the urine, but the following, by Dr. Konyaeff *(Lancet)*, goes to show the absolute certainty of the presence of these bodies in the kidneys, in not a few cases, at any rate, of typhoid. The Dr., with the aid of Dr. Uskoff, has made researches "on the microscopic structure of some little nodules found in the kidneys of typhoid-fever patients, in twenty-one cases out of 120 *post-mortem* examinations of bodies dead of this disease, in the Alexandroff Hospital in St. Peters-

burg, during the year 1887. The preparations were stained with a solution of methyl in dilute spirit and fuchsine in a 5-per-cent. solution of carbolic acid. In all the cases examined there were found in the centre of the nodules colonies of slightly colored bacilli precisely like those of typhoid. No others were seen. In two cases these were successfully sown in nutrient jelly, and from them a double kind of colony was developed exactly like typhoid colonies. Potato cultivations were also reared, and the microscopical examination of these left no doubt that the jelly cultivations were cultivations of true typhoid bacilli."

Compressed Tablet Triturates.—The advantages of prescribing such powerful remedies as aconite, morphia, arsenic, etc., in the form of triturates, are becoming more obvious, now that physicians have had some experience in administering medicines in this way. We have no faith in the potency, homœopathically speaking, of triturates, yet we can readily appreciate the benefits to the patient of giving medicines in a state of minute subdivision. Their accuracy and convenience in administration, coupled with the absolute freedom from danger in prescribing, always attending to a greater or less extent, the dispensing of dangerous drugs, in the form of powders, drops, or large doses in solutions, is one sufficient reason for their popularity. We have, for some time, used the tablets prepared by John Wyeth & Bro., of Philadelphia, and can vouch for their efficacy and convenience. They are, we believe, absolutely exact, and will keep indefinitely with little or no danger of loss; they can be readily swallowed with a mouthful of water; or, if smaller doses be required for infants, the tablets can be reduced to a fine powder, by simply crushing with a knife or the thumb nail.

Antipyrin in Menstrual Colic.—Dr. Windelschmidt, *Med. Chir. Rundschau*, states that thirty grains of antipyrin administered as an enema proves an excellent sedative in menstrual colic, its action ordinarily occurring within half an hour, although in some cases the injection had to be repeated after twelve hours. In two cases where, after nearly every well-known method of treatment had failed to prevent most violent pains and colic lasting through eight days of menstruation, injections of antipyrin in the morning and evening produced the most wonderful success; usually this relief was accompanied by narcotic effects, the patients falling asleep, and waking entirely free from pain; no unfavorable symptoms occurred, with the exception of profuse sweating and frequently slight ischuria. For prevention of collapse a glass of wine is ordinarily administered.

Deafness.—Kent O. Foltz, M.D., in an article on Otology (*Am. Med. Jour.*), draws attention to the use of the tuning-fork as a means of differentiating between deafness caused by disease of the external or the middle ear, and that caused by disease of the internal ear. Strike the fork on some non-resonant body, and hold it close to the external and auditory meatus. The vibrations are scarcely perceptible. Strike it again, and hold the end of the handle on the mastoid process, when the vibrations are distinctly heard. Therefore the disease is in either the outer or the middle ear. If the outer ear is healthy, then the middle ear must be examined. If the patient is deaf, and hears the tuning far better by ærial than by bone conduction, the difficulty is almost always in the inner ear or labyrinth.

Asphyxiation by Illuminating Gas.—The following rules were given at a recent meeting of the American Gas Light Association, of Toronto, for the treatment of persons overcome by gas:

1. Take the man at once into fresh air. *Don't* crowd around him. 2. Keep him on his back. *Don't* raise his head, or turn him on his side. 3. Loosen his clothing at his neck and waist. 4. Give a little brandy and water—not more than four tablespoonfuls of brandy in all. Give the ammonia mixture (one part aromatic ammonia to sixteen parts water) in small quantities, at short intervals—a teaspoonful every two or three minutes. 5. Slap the face and chest with the wet end of a towel. 6. Apply warmth and friction if the body and limbs are cold. 7. If the breathing is feeble or irregular, artificial respiration should be used and kept up until there is no doubt that it can no longer be of use. 8. Administer oxygen.

The Ill-effects of Prolonged High Temperature.—The saying, that "prolonged high temperature kills" has been denied by Professor Pott, of Halle, who, at a recent meeting of G-

man naturalists and physicians, held at Cologne, said that high temperatures do not constitute a permanent danger to patients, and that he is inclined to consider a considerable degree of fevers is beneficial rather than otherwise. He believed that the pyrexia killed the microbes if long enough continued. He did not believe in antipyretics in eruptive fever and pneumonia, and would give baths only so far as was necessary to promote the functions of the skin.

Uterine Hæmorrhage.—Dr. Scudder, in his work on Diseases of Women, says:—"In passive uterine hæmorrhage I have placed more dependence upon carbo. veg, 2d dec. trituration, than upon any other remedy, though, of course, it is not adapted to all cases. I give it in grain doses every one to four hours, and usually follow it with the tincture of cuprum as a blood-maker." No experimenter has ever discovered a solvent for this drug, hence we cannot account for its probable action in such a manner.

Gonorrhœa.—Dr. McPheron (*Am. Med. Jour.*) has had great success in treating gonorrhœa in the male by injecting a 1% solution of muriate of cocaine every three hours, which is held in the urethra for a few minutes each time, the canal being will cleansed before its use by injections of tepid water. He also gives internally:

℞.—Mag. Sulph., ... ℥iij.
Pulv. cubebæ, ... ℥ij.—M.

Sig.—℥j. morning and evening in a wineglass of water. This is to keep the bowels open and the urine bland, thereby preventing constipation with pelvic congestion.

Simple Test for Arsenic.—The following is simple and reliable, *Am. Jour. Pharm.*:—To the suspected liquid is added, in a test tube, a solution of caustic potash or soda, and then a fragment of aluminium. The mouth of the tube is then closed wi ı a paper moistened with a solution of nitrate of ılver. If arsenic be present, the paper turns bl ·k. Aluminium is preferable to zinc, for the la ·r may contain arsenic, whilst aluminium is al· vs free from it.

.berculosis from Cows.—The report of the Su Committee, appointed by the Dominion Parlia ent, to inquire into the possibility of the communication of tuberculosis from animals, has been handed in. It goes to show that the opinion of prominent medical men is that the disease may be communicated to man through the flesh and milk of cows. It is now in order that legislative precautionary measures be taken.

Thallin in Gonorrhœa.—This remedy is an antiseptic as well as an antipyretic. It has been successfully used by the Germans in the treatment of gonorrhœa. An injection of the strength of 1 or 2% of the tartrate is used once a day. It may be used from the very commencement of the attack, but should be continued some time after the discharge has ceased.

Terpin in Bronchitis.—The following formula by Chéron (*Monde Pharm.*) is spoken highly of as not producing gastric disturbance if given after meals:

℞.—Terpin . . . . . 75 grains.
Glycerin . . . .
Alcohol (of 95 per cent) } āā 2-2½ ounces.
Syrup of honey . .
Vanillin . . . . 4 grains.—M.

One tablespoonful contains about seven grains of terpin. Two tablespoonfuls are given daily to loosen and finally diminish expectoration.

For Uterine Hæmorrhage.—The *Rev. Therap.* gives (*Med. News*) the following formula foruterine hæmorrhage:

℞.—Extract of Indian hemp . . 7½ grs.
Fluid extract of ergot . . . 1 drachm.
Fluid extract of hamamelis,
Tr. of cinnamon . . . āā ½ ounce.—M.

Sig.—One teaspoonful three times daily.

Headache.—Dr. Bringier (*Med. Surg. Rep.*) says that the following prescription is valuable:

℞.—Antipyrin, ... gr. xv.
Pot. Bromidi, ... gr. xv.
Tr. Digitalis, ... gtt. vij.
Aq. ad. . . . . ℥ ss. M.

Sig.—Take at once.

This is the adult dose. It is adapted to headaches of fevers, cerebral congestion, migraine, and headaches of hysterical women.

Glandular Affections.—S. J. Mays, M.D., in the *Am. Med. Jour.*. speaks very highly of the use of calcium chloride in glandular affections of the neck. The dose is from two to four grains for

children, and from ten to twenty grains for adults, the best vehicle being the syrup of sarsaparilla.

THE "OCCIDENTAL MEDICAL TIMES" is the new title of the journal hitherto known as the "Sacramento Medical Times." The journal has been enlarged to fifty-six pages and the subscription price is to be reduced to $2 per annum, beginning with the number for January, 1889.

ELECTION OF MEMBERS TO THE HAMILTON HOSPITAL BOARD.—Drs. Miller and Malloch were recently elected to the acting staff of the above hospital, and Drs. McKelcan and McCargow as members of the consulting staff.

FOR FRECKLES.—The *Ph. Post* gives the following:

White precipitate,
Bismuth subnitrate,
Ointment glycerine, equal parts.
Use thrice daily.

TOOTHACHE.—The *Jour. de Med.* de Paris gives the following as useful:

℞.—Acetate of morphia, . . ¾ grs.
Essence of peppermint, . 4 drops.
Phenic acid (pure), . . 20 "
Collodion q. s. to make, . 1 drachm.
Apply with cotton.

TOXIC ACTION OF ANTIPYRIN WHEN PRESCRIBED WITH NITROUS ETHER.—A suit for malpractice against Dr. Castleman of Houston, Tex., is pending. Two or three other cases have been reported. Experiments by Dr. Ludwig Bremer and others fail to demonstrate the toxicity of the compound.

ALOPECIA IS CONTAGIOUS.—The report of the committee appointed by the Academy of Medicine, in Paris, to consider the question of the contagiousness of alopecia is such as to leave no doubt that they believe it is a contagious disease.

Rev. Therap. gives the following formula for constipation with hæmorrhoids:

℞.—Glycerine, ... 60 parts.
Soap, ... 10 "
Fl. ext. of rhubarb, . . . 40 "
Ess. of chamomile, ... 10 drops. M.
S.—Use as an enema three times daily.

FOR MIGRAINE.—Dr. Little (*Dub. Med. Science*) says he has had good results from twenty grains of salicylate of sodium in a wineglassful of water, made effervescent by the addition of a dessertspoonful of effervescent granular citrate of caffeine. He has not found the latter alone efficient.

ARSENIC IN LEUCOCYTHÆMIA.—This remedy has been shown to increase the relative and absolute number of red corpuscles (*Lancet*) in a case of leucocythæmia. The remedy was employed in large doses, as much as one grain of the arsenious acid having been administered in twenty-four hours.

FOR THRUSH AND STOMATITIS.—The following is recommended (*Med. Brief*) for thrush and stomatitis:

℞.—Acidi boracic. . . . . gr. x.
Listerine, ... ℥jss.
Glycerine, ... ℥ijss.—M.
S.—Use as a wash for the mouth every hour or two.

PERSONAL.—Dr. Price Brown has opened an office at the corner of College Street and Spadina Avenue, for the treatment of diseases of the nose, throat and lungs, exclusively.

PETERBOROUGH MEDICAL ASSOCIATION.—At the regular meeting of the Peterborough Medical Association, held on Thursday, January 3rd, Dr. J. H. Fife was elected President, and Dr. Fred. H. Brennan, Sec.-Treas., for the ensuing term.

APPOINTMENTS.—Dr. S. M. Henry has been appointed Associate Coroner for the County of Waterloo.

Dr. P. N. Davey, of Duart, has been appointed Associate Coroner for the County of Kent.

ANOTHER USE FOR ETHER DURING ANÆSTHESIA.—Dr. Hare writes to the *Univ. Med. Mag.* that if, during anæsthesia, respiration stops, he has found that in a large number of instances, both in man and in the lower animals, the free use of ether poured upon the belly causes so great a shock, by the cold produced by its evaporation, as to cause a very deep inspiration, which is often followed by the normal respiratory movements

THE GASTRIC JUICE IN ACUTE FEBRILE DISEASES.—Regarding the importance of feeding in acute infectious diseases, Dr. Gluzinski, of Cracow, has come to the following conclusions, *Deutscher Archiv of Klin. Med.*, as to the value of the gastric juice in such cases :—1. During the whole course of the fever (except in the final stage of typhoid fever) the gastric juice contains no hydrochloric acid. 2. The gastric juice digests neither in the organism—since it contains no peptone—nor outside the organism. 3. This gastric juice digests very well, artificially, after the addition of the proper quantity of hydrochloric acid, which shows that it contains pepsin, and that the impossibility of digestion is due solely to the absence of hydrochloric acid. 4. With the disappearance of the fever, or somewhat later, the gastric juice becomes capable of digestion both within and outside the organism. In regard to the chronic febrile diseases, normal, digesting gastric juice exists during the fever.

Other things being equal, the nature of the gastric juice in febrile diseases is influenced more by the nature of the infection than by the high temperature. The possibility of a secretion of active gastric juice in chronic febrile diseases increases the hope of good results from forced feeding.

EARLY EXCISION IN TUBERCULAR DISEASE OF THE HIP-JOINT.—The London correspondent of the *Med. Rec.* says that Mr. Barker read a paper at the Medical and Chirurgical Society, in which "he urged that at a certain stage of the disease, the complete removal of the tubercular tissue ought to be possible. When treatment by rest had failed he would perform excision. He maintained that in many cases the wound ought to heal by first intention throughout, and often without drainage. He then related a case which he had successfully treated. The patient was a boy, five years of age, who had been under careful treatment for a year. The head of the femur was destroyed and an abscess of the usual kind had f ned. Excision was performed, and primary u on took place, without drainage, under one d sing. The patient left hospital on the four- t th day, wearing a double Thomas' splint."

REATMENT OF TYPHLITIS.—The following plan o reatment is recommended by Bouchard, *France l.*—1. Alleviate the pain, either by injections o phine or the application of belladonna ointment under a hot poultice. 2. Wash out the large intestine by copious hot enemata, consisting of at least a quart of hot water in which ʒjss of borate of sodium is dissolved, or to which two or three teaspoonfuls of a mixture of equal parts of tincture of benzoin and spirit of camphor is added. 3. The patient must be kept absolutely quiet. 4. Only the mildest kind of purgatives, if any at all, should be used. 5. Food should consist of milk diluted with alkaline waters, with the yelk of an egg at a later period.

THE USES OF GELSEMIUM SEMPERVIRENS.—Dr. Garland concludes an article in the *Boston Med. and Surg. Jour.*, in which he speaks highly of the drug, as follows :—The dose of gelsemium depends upon the preparation used and the effect which one desires to obtain. For the relief of neuralgia one should give 3 to 5 drops every half-hour or hour, according to the intensity of the pain. To produce sweating, 1 drop every half-hour is sufficient, provided the patient be well wrapped up in bed ; 1 drop of the fluid extract will relieve the cough and discomfort of acute bronchitis ; the tincture of gelsemium sempervirens is slightly weaker than the fluid extract.

The advantages which gelsemium sempervirens can legitimately claim, are :—1. It has an agreeable taste, and is not repulsive to adult or child. 2. It does not irritate the stomach or bowels. 3. It produces no depressing after-effects from ordinary doses, the sleep is natural, and the patient awakens refreshed. 4. In ordinary doses it causes no depression of the heart, and it can be used in all forms of organic diseases of the heart. 5. It does not create a habit. There is no depression of nerve-centres following its use, and therefore no craving for more of it. 6. Its toxic symptoms are very characteristic and striking, and they appear early, so that plenty of warning is given. Morphine is the best antidote, combined with digitalis and artificial respiration.

MASTITIS.—In the Columbia Hospital for Women (*Obs. Gaz.*), a liniment composed of half an ounce of camphor, dissolved in three ounces of turpentine, has been found most effective in checking the secretion of milk in mastitis ; it alleviates pain, lessens induration, and is more effective in reducing inflammation than any other remedy that has been tried.

Books and Pamphlets.

A CLINICAL ATLAS OF VENEREAL AND SKIN DISEASES, by Robert W. Taylor, A.M., M.D., Surgeon to the Charity Hospital, New York, and to the Department of Skin Diseases of the New York Hospital; late President of the American Dermatological Association; Joint Author of Bumstead & Taylor's "Pathology and Treatment of Venereal Diseases." In eight very handsome imperial folio parts, with 58 full-page chromo-lithographic plates, containing 191 figures from original paintings, and selected from the works of Baesensprung, Cazenave, Clerc, Cullerier, Tilbury Fox, Fournier, Hebra, Hutchinson, Kaposi, Mayr, Neumann, Ricord and Balmanno Squire, as well as numerous woodcuts from original sources, and from the works of Albert, Demarquay, Durkee, Gosselin, Guérin, Leloir, Marcacci, Montméja, Parrot, Parry. Profeta, Tillaux and Voillemier. Price, per part, $3.00. Sold only by subscription. Specimen plate will be sent post-paid on receipt of ten cents in stamps. Montreal: The Canadian Subscription Co., 647 Craig Street.

In parts III. and IV. of Taylor's Atlas, we recognize again the hand of a master, both in the text and in the plates. The plates are as nearly life-like as plates can well be. As illustrations of the clinical character of eruptions they are without an equal, and those members of the profession who desire a thorough knowledge of the subject will do well to subscribe to the work.

CLINICAL LECTURES ON DISEASES OF THE URINARY ORGANS, delivered at University College Hospital, by Sir Henry Thompson, Surgeon-Extraordinary to H. M. the King of the Belgians, etc., etc. English edition. London: J. and A. Churchill; Toronto: Vannevar & Co.

The chief additions to this wonderfully useful and popular book "relate to the supra-pubic operation for stone and tumor; to the results of digital exploration of the bladder; to the most recent modes of affording relief by operation in cases of advanced prostatic disease; to the latest operative treatment for tumors of the bladder; and embraces a *résumé* of my entire experience of operations for calculus, made up to the end of the year 1886, numbering about 900 cases."

Those who know the former editions will be pleased that so great a master has given to the world the latest advances in the surgery of his domain. The work before us consists of 470 pages, the size and usefulness being greatly increased. Every practitioner should have it.

THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE RECTUM, by Wm. Allingham, F.R.C.S.E., Senior Surgeon to St. Mark's Hospital, etc., etc. London: J. & A. Churchill.

In this fifth edition, anatomical and pathological questions are entered into only when essential to diagnosis and treatment. It embraces, in a revised form, all that appeared in former editions, and special chapters have been written on "Inguinal and Lumbar Colotomy," "Excision of the Rectum," and "Incontinence of Fæces." The illustrations are good and most of them have been drawn by H. W. Allingham, F.R.C.S.E., the son of the author. Many forms of rectal disease obstinately resist all treatment hitherto available, therefore a work so comprehensive and essentially practical in character will be of great service in the every-day work of the general practitioner; and, being minute in its description of operations, it cannot fail to commend itself to the surgeon.

THE VEST-POCKET ANATOMIST. Founded upon "Gray." By C. Henri Leonard, A.M., M.D., Professor of the Medical Diseases of Women and Clinical Gynæcology in the Detroit College of Medicine. *Fourteenth revised edition*, containing 193 illustrations, "Dissection Hints" and Visceral Anatomy. Cloth, 12mo., 304 pages. Price, $1.00. Detroit: Illustrated Medical Journal Co. Toronto: Carveth & Co.

This useful little work has been increased by about 100 pages. It will no doubt be as popular as heretofore.

FAVORITE PRESCRIPTIONS OF DISTINGUISHED PRACTITIONERS; with Notes on Treatment. Compiled from the Published Writings or Unpublished Records of Drs. Fordyce Barker, Robert Bartholow, Samuel D. Gross, Austin Flint, Alonzo Clark, Alfred L. Loomis, F. J. Bumstead, etc. By B. W. Palmer, A.M., M.D.

This number of Treat's Medical Classics gives a large number of the most careful prescriptions known. It should be very useful to the busy practitioner.

Births, Marriages and Deaths.

At Port Hope, January 28th, Dr. M. Lavell of Smith's Falls, Ont., to Maggie Shepherd of Smith's Falls, Ont.

THE CANADA LANCET.

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE, CRITICISM AND NEWS.

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Original Communications.

TYPHLITIS AND APPENDICITIS.*

BY WILLIAM OSLER, M.D., F.R.C.P. LOND.

Professor of Clinical Medicine in the University of Pennsylvania.

Cæcal and peri-cæcal inflammations are described under the various terms typhlitis, peri-typhlitis, para-typhlitis, peri-cæcal abscess, and appendicitis. I think we may clinically, and for practical purposes, distinguish two groups of cases, to the first of which the name *typhlitis* may be restricted, and to the second *appendicitis*, or, perhaps, better, as Dr. Fitz suggests, *perforative appendicitis*.

Typhlitis.—By this we understand inflammation of the cæcum. The term has also been used to designate inflammation of the contiguous parts as well; but it may be limited to the cases in which the caput cæci and the adjacent portion of the ascending colon are involved. Unfortunately, we know nothing of the anatomical condition described under this term. I have myself never seen a post-mortem, nor do I know of a report in which the disease was confined strictly to the walls of the intestine in these regions.

The cases are commonly met with in young persons, particularly in young males. The attacks are very often associated with errors in diet. In the majority of cases there is a history of constipation. The symptoms are very distinctive. The p ent complains of pain in the right iliac fossa; t e is constipation and often nausea—sometimes v iting. At first there may be no fever, but s sequently the temperature rises from 100° t 02°. On examination, the patient is usually f d with the right thigh flexed on the abdomen. There is slight fullness in the right iliac fossa; tenderness on pressure, and, often, dullness on percussion. In the majority of instances there is distinct induration, which may have a rounded outline, so that the expression "sausage-shaped tumor" has been applied to the condition. Such cases are extremely common, and are usually regarded (no doubt properly) as the result of fæcal impaction — typhlitis stercoralis. With proper treatment, recovery is the rule. Local applications—the ice-bag, turpentine stupes—are usually found sufficient to allay pain. To break up the fæcal masses, large injections should be used. Purgatives may be administered, but I prefer, as a rule, to rely on large injections.

Attacks of this kind may repeatedly occur in the same patient; I have known of four or five recurrences within four years. There can be very little doubt that this local inflammation is due to fæcal impaction. The inflammation is confined to the intestinal wall, and rarely extends to the tissues in the neighborhood. It is true, that occasionally there may be more serious disease of the cæcal coats. I have put on record two instances of round ulcer of the cæcum, in both of which perforation occurred, with the production of peri-cæcal abscess. It is quite possible, of course, that inflammation may extend to the loose connective tissue behind the cæcum—when that organ is attached—and even go on to suppuration. But, with the exception of the cases of ulceration, I have no personal knowledge of instances in which there has been peri-cæcal abscess apart from disease of the appendix.

The opinion has been expressed, and is I believe widely held, that the cases such as I have here described are also in reality due to appendix disease; that typhlitis and peri-typhlitis mean in all cases tubal affection. I confess there is often great doubt as to the true nature of a case, but, clinically, I believe we can recognize a stercoral typhlitis. There is at present in my wards at the Philadelphia Hospital a case in illustration. Lad, æt. 22, admitted 22nd, with temperature of 102°, a furred tongue, constipation and abdominal pain. On examination, there was tenderness in the right iliac fossa, the thigh was drawn up and everted; the right iliac region was dull, tender to the touch, and presented a distinct induration, without definite outlines. He had nausea and vomiting on

* substance of remarks made at the Toronto Medical Society, December 26, 1888.

admission. Stupes and poultices were applied, and large enemata were given; no opium, as the pain was not excessive. The injections brought away a number of hard fæcal masses. The temperature on the third day was normal, the induration and tenderness gradually disappeared, and on the sixth day the sense of resistance in the two sides was equal, and the patient said that he felt quite well. He had had a similar attack six weeks before. Such cases we have all seen, and whatever the morbid condition may be, I think they possess features which separate them from the next group.

Appendicitis.—In the second group of cases the lesion proceeds from the appendix vermiformis, which is liable to various affections—catarrhal inflammation, catarrhal ulceration, obliteration, obliteration of the proximal end, dilatation of the tube, and perforation. Foreign bodies may also lodge in it, and fæces moulded to the tube may become hardened and calcified so as to form small enteroliths.

In a recent report (*Med. and Surg. Rep.*, Oct. 6th, 1888) I gave notes of eleven cases in which I had met with ulcers in the appendix, usually in connection with phthisis or typhoid fever. I have never met with foreign bodies in the appendix. On one occasion five apple pips were brought to me as having been found in, and removed from the tube, in a dissecting-room subject; and in one of the cases in the post-mortem books of the Montreal General Hospital, Dr. Sutherland (who was acting as Pathologist in my absence) records the presence of six or eight snipe shot in the appendix of a man dead from Bright's disease. The resemblance of the small enteroliths to date-stones, frequently leads to error.

Inflammation and ulceration of the appendix vermiformis (so long as it is confined to this tube) may produce no definite symptoms. There may be the most extensive ulceration, the lumen may be completely obliterated, there may be extreme distention, without the patient manifesting any signs of abdominal disorder.

If the appendix is quite free, it is possible that ulceration may go on to perforation, without the tube forming attachments. This, however, is very exceptional. More commonly adhesions form and the perforation leads to localized abscess, the situation of which will depend upon the position of this extremely variable structure. It is most commonly situated in the right iliac fossa, and is either within the peritoneum, when the appendix is entirely surrounded by this membrane, or it is behind the peritoneum, when the appendix (which is rarely the case) has only a partial serous covering. I have seen perforation occur with the formation of localized abscess, within the pelvis in the neighborhood of the broad ligament; in another instance immediately upon the sacrum, the tip of the appendix lying to the left of the middle line; and, in a third instance, the abscess was high up behind the mesentery upon the psoas muscle.

I do not think that sufficient stress has been laid upon the fact, that this local inflammatory process almost invariably precedes the graver manifestations. That healing may take place at this stage, is shown by the occurrence of an obliterated tube closely adherent with fibroid thickening and much pigmentation of the surrounding tissue. Once perforation has occurred with abscess formation, the course is extremely variable. It is within the experience of almost every physician to have seen the pus appear anteriorly in the neighborhood of the groin, where it may open spontaneously. The presence of gas, or even small fragments of fæces, may show that there is open communication with the bowel. Two such cases I saw with my preceptor, Dr. Holford Walker, of Dundas, in 1868 and 1869. One of these cases made a good recovery; the other, with much more extensive abscess formation and perforation in several places (through which gas discharged), succumbed to septic fever. That the tube of the appendix is not always obliterated at its cæcal end before perforation occurs, as is claimed by some writers, is shown by such cases. The pus may burrow and appear in the lumbar region, or it may pass down and appear in the peritoneum and form a peri-rectal abscess. A more favorable event is, when the abscess perforates into a neighboring viscus—the colon, the cæcum, the rectum or the bladder. In a recent report of a case in a French Journal in which the abscess perforated into the bowel, the characteristic oval enterolith was found with the discharged pus and fæces. Perforation into the bladder is less common. At the Montreal General Hospital, in the Summer session of 1882, I lectured upon two cases in which this event occurred with recovery. I met with a curious sequel in a case

of peri-cæcal abscess which perforated into the bowels. The patient had for some years after, and may still have for aught I know, persistent enlargement of the right leg, due, undoubtedly, to chronic venous stasis consequent upon the narrowing of, or perhaps the obliteration, of some of the large veins in the pelvis. A third and almost necessarily fatal mode of termination, is when the local circumscribed abscess perforates the peritoneum, setting up a diffuse, virulent and septic inflammation.

I have never yet seen instances of perforative appendicitis in which there were not attempts made to limit the inflammation. Even when the appendix has been free in the peritoneum, walls circumscribing the abscess are formed by the adherent mesentery, retro-peritoneum and intestinal wall. Symptoms of perforative appendicitis are fairly well defined. A number of cases begin with intestinal trouble, constipation or pain in the ilio-cæcal region, lasting for a variable time. A more characteristic mode of onset is a sudden, sharp pain in the right iliac fossa. This may be followed by collapse symptoms, or more usually by an aggravation of the intestinal disturbance. It is worth noting, that strain, such as sudden lifting or jumping, may be followed by an acute pain, and may, apparently, be the starting-point of appendicitis. The local symptoms are rarely as well marked as in typhlitis Tenderness is usually present; there may be fullness, or even induration, but in my experience, these signs are more frequently absent. The leg is usually drawn up, thereby relaxing the psoas muscle. Irritability of the bladder, as shown by frequent micturition, not infrequently occurs. The fever is moderate; the tongue is furred, but constipation is not so constant a feature as in stercoral typhlitis. Abdominal distention (tympanites) comes on early, and may interfere with proper examination. A rectal examination may indicate fullness towards the roof of the pelvis, but unless the whole hand used, the ordinary digital exploration is practically worthless. Practice on the cadaver, with the pelvis exposed, shows how futile is the attempt reach, even with the longest finger, those higher portions of the pelvis which the peri-cæcal inflammation usually affects. Increasing tympanites, diffuse tenderness on palpation, aggravated constitutional symptoms, indicate the spread of the peritonitis. It must not be forgotten that the peritonitis may be limited to the lower portion of the abdomen, even confined to the coils of the small intestines situated within the pelvis. Such abdominal distention may be extremely slight. I saw, with Dr. Musser, last year, a case of perforation of the appendix with peritonitis, in which the abdominal walls were flat and presented a hard, board-like resistance to palpation.

In a considerable majority of cases, I think the sudden onset with sharp intense pain, indicates, not the perforation of the appendix, but the extension of an already existing inflammatory process. As I have stated, extensive ulceration, distention, adhesion and obliteration of the tube, may occur in persons in whose history there is no account of localized abdominal inflammation. It is not impossible that ulceration, leading to perforation and local abscess, may occur without exciting severe symptoms. I have so often seen, about the perforated appendix, signs of chronic inflammatory mischief indicated by fibrous bands and pigmentation, that the process has certainly ante-dated the onset of the acute fatal illness of only a few days' duration. Marked tendency to recurrence finds also its explanation here, in the temporary aggravation of the condition. Surgeons have repeatedly, in these cases of recurring attacks in the peri-cæcal region, cut down and removed an adherent, chronically inflamed and even perforated appendix.

In many instances the diagnosis of perforated appendix presents great difficulties. Perhaps, of all the symptoms, the most important is the sudden agonizing pain occurring either at first, or after gastro-intestinal symptoms have lasted for some days. Its importance may be gathered from the fact, that of 257 cases analyzed by Fitz, it was present in 216. Abdominal pain and distention are more marked, and occur earlier than in ordinary typhlitis. Induration in the iliac fossa is also less common; indeed, a very considerable proportion of the cases present no local tumor. The diagnosis in such cases rests largely upon the mode of onset, the development of symptoms, the previous history of the patient, the absence of signs of hernia or of internal strangulation. The occurrence of frequent micturition and the characteristic decubitus of the patient, are highly suggestive symptoms. Cases occur in which it seems impossible to accurately determine the condition, and the patient

presents the picture of general peritonitis, which has started from some unknown locality.

Treatment of peri-cæcal abscess from appendix disease, has made great progress within the past few years, and the operation devised by Willard Parker has now become, not only a very frequent, but a most successful one. As I have already stated, there are many instances of spontaneous recovery, even when extensive suppuration has occurred. We all have seen, in the recurring attacks of this disease, the gravest symptoms disappear and the patient rapidly convalesce. The medical treatment is much the same as I have spoken of in typhlitis. Opium, in some form, has almost always to be used to relieve pain. For constipation, large injections may be employed. In the early stage I never use purgatives. I would hesitate to employ even a saline cathartic, which moves the bowels with very little disturbance of the peristalsis. Not that I would hesitate when general peritonitis is established, as I believe this method of treatment to be in a high degree rational. A concentrated saline purge produces local depletion of the intestinal vessels from duodenum to cæcum, and removes in great part the interstitial œdema of the intestinal wall upon which, chiefly, the paralysis depends. But, in the early stages of the affection, our means should be directed towards limiting the inflammatory process, and favoring those conservative barriers which nature invariably sets up against extending inflammation. I have been so much impressed with the fact, that in these cases the dangerous symptoms seem to originate by the extension of the disease from a localized peri-cæcal abscess—the walls of which may be in part mesenteric, or, as I have seen, intestinal—that I dread the disturbing influence of purges. The indications for surgical interference are not always clear; but my experience has taught me that the abdomen is much more frequently left untouched than it should be, and that an operation is too often deferred until practically useless. Local indications may be very positive, particularly when the perforated appendix lies behind the peritoneum, in the iliac fossa spine above Poupart's ligament. But when the abscess is high on the psoas muscle, or lies within the brim of the pelvis, or far over towards the middle line, these symptoms are absent, and in such cases, from the general condition alone, the indications for operation must be gathered. We may say, as a general rule, that in young persons, in whom the attack has set in with severe pain in the right iliac fossa (whether preceded or not by previous digestive disturbance), and in whom the constitutional symptoms, as shown by rapid pulse, fever and coated tongue, indicate a serious lesion—when tympanites and abdominal tenderness exist, it is better in these days of safe laparotomy to give the patient the benefit of any diagnostic doubt, even without the existence of local tumor, and to explore thoroughly the peri-cæcal region. Still more urgent would such indications be, if the patient had had previous, though less severe attacks.

PAIN IN EYE DISEASES.*

BY A. B. OSBORNE, M.D.,

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In the following paper I shall endeavor briefly to review some time-worn facts familiar to all, but presented in an order probably more familiar to the specialist than the general practitioner, and I hope in presenting the well-known painful symptoms in Eye Disease, viewed from a diagnostic standpoint, that it may prove of interest to the busy physician.

The eye is such a perfectly accessible organ, and the examination—not only of the exterior, but also of the contents and interior of it—can be made with such facility, that we are apt to rely too much upon purely objective symptoms for the basis of our diagnosis. To do justice to the eye under examination, due attention should be paid to the subjective, as well as the objective signs, and the most important subjective symptom is pain. In no other part of the body does the patient describe his sufferings more graphically, or localize them more correctly; and we ignore an important factor in the formation of a correct diagnosis, when we pay little heed to his careful description.

The only sensory nerve of the eye and its appendages is the fifth, which supplies the conjunctiva, cornea, and lachrymal gland, and, through its long ciliary branches, the iris and ciliary body: so

* Read before the Hamilton Medical and Surgical Society, February 5th, 1889.

that all pain must be made evident through the branches of the fifth nerve. Pain in the eye, as in other portions of the body, is either inflammatory or non-inflammatory, and inflammation of any of the structures of the anterior portion of the eye is accompanied by pain, thereby differing from inflammations of the lining membranes and contents.

In *Conjunctivitis*, although the nature of the disease is evident at a glance, the character of the pain is distinctive—a feeling of smarting and dryness, itching and sensations of sand in the eye; occasionally the nerve branch supplying the lachrymal gland partakes in the irritation, causing a copious flow of tears. The patient describes this pain accurately and localizes it correctly, indeed he not infrequently indicates the exact point upon the palpebral conjunctiva at which a foreign body is situated.

Episcleritis is not usually characterized by pain, but it may occur owing to a secondary compression of the ciliary nerves by the inflammatory exudation.

The pain accompanying *Ulceration of the Cornea* is, as a rule, acute, and referred to the ciliary region. Associated with this pain there is frequently Photophobia, in the production of which a curious reflex occurs. When the light falls upon the retina, there follows a painful blinding sensation, accompanied by an incontrollable impulse to close the eyes. The point to be observed is, that the pain is not caused by the light irritating the inflamed cornea, but by light falling upon the uninjured retina. The optic being a nerve of special sense and almost, if not entirely, devoid of common sensation, it is evident that, for the production of this reflex, the irritation must be transferred to the sensory nerve of the eye—the fifth; probably the same chain is concerned in the reflex sneezing which occurs in some persons when passing suddenly from dim into bright glaring sunlight. It is possible that there is a sufficiently intimate connection between the optic and fifth nerves in e retina, to allow the transference to take place ere. Photophobia is a valuable symptom, as it ually indicates that the cornea has become af- :ted.

In *Iritis* there is acute suffering. The pain is elt in the eyeball and radiating over the regions pplied by the supra and infra-orbital branches the fifth, and sometimes along the side of the nose. It is very intense in character, worse at night and early in the morning. In this affection there is pain when the eye is exposed to light, but it differs from that of photophobia in being direct and not reflex, the inflamed and painful iris contracting when the light falls upon the retina and so causing the pain directly. Iritis may be accompanied by photophobia also. When iritis is accompanied by tenderness to the touch, we know that the ciliary body has become involved in the inflammation—a condition known as *Irido-cyclitis;* the degree of tenderness being a good gauge of the severity of the process. The only other affections giving rise to tenderness on pressure are glaucoma and neuralgia, and in these the tenderness is neither constantly found, nor is it confined to the points of contact.

Acute Inflammatory Glaucoma gives rise to severe pain in the eye, occurring chiefly when the head is congested. There may also be acute pain in the bones forming the orbit. Accompanying the pain there is inflammation and chemosis of the conjunctiva, with subconjunctival injection Chemosis and tumefaction of the lids also occur in severe cases. The pain in the eyeball is owing to the stretching of the ciliary nerves, due to the increase in the contents of the eye, and to this stretching of the nerves is to be ascribed the dilatation and immobility of the pupil, as well as the anæsthetic condition of the cornea. Coincident with the onset of acute glaucoma, there is usually some febrile disturbance, with increased rapidity of the pulse and vomiting. In this connection it may be well to remind you of the fact, that atropine will induce glaucoma in an eye predisposed to it, and the application of atropine to an eye already suffering from this affection will materially assist the progress of the disease.

In *Suppurative Choroiditis*, which involves the entire uveal tract, the pain is indescribable and the ball exquisitely sensitive to the touch.

The ordinary choroidal and retinal inflammations are unaccompanied by pain, so also with affections of the vitreous humor and optic nerve.

Tenderness in a shrunken eyeball indicates inflammatory action involving the remains of the ciliary nerves, and is an indication for its removal, to avoid sympathetic inflammation in the sound eye.

Intra-ocular tumors, especially sarcomata, occasionally give rise to aching pain.

From the foregoing it will be seen that pain—almost pathognomonic in character—usually accompanies inflammatory affections of the anterior half of the eyeball.

Non-inflammatory pain, so-called, occurs in neuralgia, glaucoma, errors of refraction, and cases in which there is defective action of the motor apparatus, and in asthenopia.

Neuralgia of the eyeball is most frequently found in persons who are subject to neuralgic pains in the head, especially affecting the fifth nerve. The pain is intermittent, may be accompanied by tenderness to the touch, the pupil remains active, usually only one eye is affected, and there are no ophthalmoscopic symptoms.

Glaucoma Simplex, or chronic non-inflammatory glaucoma, may be accompanied by a constant aching pain, with a sense of fulness in the eye, or the pain may be referred to the brows. There is no evidence of inflammation, and the pain is by no means a constant symptom. Of course the characteristic symptoms of glaucoma serve to distinguish this affection from the others on the non-inflammatory list.

The pain experienced in cases in which there is an *Error of Refraction*, and that which occurs with defective action or innervation of the motor apparatus, is very similar, and due to the same cause, viz., a want of proper relation between the amounts of convergence and accommodation brought into play This form of suffering is familiar to all who have strained their eyes over small type, or read too much in a bad illumination; it consists of a dull, sickening, frontal headache, with a tired feeling in the eyes, or the pain may be diffused through the head. Where the convergence is principally at fault, giddiness may be added to the other symptoms. There is frequently an irritable condition of the conjunctiva, accompanied by blepharitis in hypermetropes, which yields almost immediately when the normal relation between convergence and accommodation is restored by suitable glasses.

The term *Asthenopia* has long been to the ophthalmologist what Debility was to the general practitioner, viz., a harbor of refuge in a sea of doubt. True, every year reduces the number of cases in which we require to generalize in this way; but it is also true, that we are still obliged to evade certain difficulties by resorting to vagueness. That there is a form of neurosis which may safely be termed *Retinal Asthenopia*, is a fact familiar to all eye surgeons, and in these cases the symptoms are entirely subjective. Pain is complained of at the back of the eyes, and it may be very severe, occurring after using the eyes for near work; accompanying the pain there is usually extreme sensitiveness to light. Mr. Gunn describes a condition of the retina in these cases, to which he has applied the term "Crick Dots"; but the detection of this anomaly is a refinement of ophthalmoscopy which few may hope to attain to.

A second form of asthenopia appears to be due to a certain existing—but difficult to demonstrate—weakness of the ciliary muscle; it is most frequently found among debilitated women who require to sew a great deal. Another form of asthenopia is referred to hyperæsthesia of the optic centres. Unfortunately, in the present state of our knowledge, it is not easy to indicate in each case the region which is at fault.

Correspondence.

OUR NEW YORK REPORT.

From our own Correspondent.

NEW YORK, Feb. 19th.

A FEW POINTS ON PHTHISIS, PICKED UP AT THE CLINICS AND LECTURES OF 1888.

ETIOLOGY.

Here the sole exciting cause of phthisis is believed to be the tubercle bacillus; this theory is accepted as proven beyond the shadow of a doubt.

DIAGNOSIS.

In reading many of the standard authors of the day, the practitioner and student are directed to look for the earliest signs of phthisis at the apices of the lungs in front, and much stress is laid on careful physical examination of that portion of the lungs situated just below the clavicle. That this view is erroneous is not generally recognized, hence the failure of many physicians to make a diagnosis of incipient phthisis. The regions that the New York physical diagnosticians lay special stress on to examine, are the scapular and supra-scapular, posteriorly; and Prof. Loomis states that much of his success in his earlier days was due to this

one fact, and he has again and again made the diagnosis of phthisis by careful examination of these regions, where competent men had failed to observe the early changes in the lung tissue, for the simple reason that they had confined their examination to the infra-clavicular regions.

Here it is that we should listen for the prolonged high-pitched breathing which is so significant, and if it is accompanied by râles on coughing, the diagnosis is almost certain. The slight dulness on percussion as compared with the opposite side, is considered of very little value; in the first place, it takes an experienced person to make it out, and by the time it can be distinctly appreciated, the chances are that the phthisical processes have advanced to the second stage. Auscultation, then, is the principal method of examination, for the reason that it is so much more delicate than percussion; and the early changes can only be appreciated by auscultation, not by percussion. Whisper resonance is much more used, for the same reason. In passing, it might be stated, that in all pulmonary examinations the posterior aspect of the chest is the one which is regarded as important, and in many instances the anterior is neglected altogether; many cases of well marked pneumonia give absolutely negative results in front, while behind all the signs of an extensive pneumonia can be distinctly appreciated. From this it is not to be imagined that only the posterior portion and apices of the lungs are to be examined; the rule is to explore every portion of the chest thoroughly, as I have seen several well marked cases of phthisis which originated in the bases of the lungs. The use of the stethoscope for the diagnosis of pulmonary diseases is almost entirely discarded in New York, and the ear substituted in place of it; in cardiac diseases it still holds sway. The much disputed question as to the seat of production of the crackling sounds and crepitant râles heard in phthisis, whether they are produced by changes in the pleura, or in the lungs; it is now considered by most observers as settled, that they are due to changes in the pleura, not in the lungs. The late Prof. Austin Flint strongly upheld the view, that most of these sounds were produced in the lungs; but since his decease, popular opinion has gradually drifted to the pleural view. Autopsies have confirmed this, and many good diagnosticians affirm that they have yet to hear the crepitant râle which used to be considered pathognomonic of the first stage of pneumonia; they regard it as a pleuritic friction-sound, and this view is borne out by cases of central pneumonia, in which the crepitant râle is absent.

MICROSCOPICAL DIAGNOSIS.

The recent improvements in the methods of staining the tubercle bacillus have at length enabled the microscope to occupy an important clinical position in the diagnosis of phthisis. The new rapid staining method essentially consists in having the staining fluids arranged in two solutions, the first of which stains the bacilli, and the second bleaches everything else except the bacilli, so that they stand out in strong relief and can readily be seen. The whole process is so simple that it can be performed by any practitioner in three minutes, much less time than it takes to make a thorough physical examination. If the bacilli are found, it is regarded as positive evidence of phthisis, even should the physical signs be absent, and they can often be observed before the physical signs give positive evidence of the disease.

A rather remarkable observation has lately been brought out by Prof. Reinzi, of Naples, who conducts one of the most careful cliniques in Europe. He states that the blood of all advanced phthisical patients is distinctly acid, and, according to the degree of acidity, the progress of the disease can be estimated. This fact can be readily observed by taking a very thin plaster paris disc, drawing a few drops of blood from the patient's finger and allowing it to filter through the disc on to some delicate test paper beneath. Nothing but serum percolates through, and the acid reaction can be distinctly appreciated. From this he concludes that, by keeping the blood alkaline by the administration of alkalies, the progress of the disease can be checked, not stopped. Observations are being made to test the value of this theory, but as yet it is too early to state the results.

TREATMENT.

No specific has yet been discovered, and the treatment is still symptomatic. If the patient is in good pecuniary circumstances, he is sent to some high and dry climate like Colorado or New Mexico. Many writers in the medical journals have published, during the last year, accounts of reported cures by the inhalation of hydrofluoric

acid gas; this method consists in placing the patient, for an hour each day, in an air-tight room, the atmosphere of which is impregnated with hydrofluoric acid gas. Garcin, of Paris, reports 100 cases, out of which 35 were cured, 41 improved, 14 remained in same condition, and 10 died. As a matter of fact, this method was carefully tried in Bellevue Hospital last summer, on six patients, and the treatment continued steadily for two months, with the result that all six are now in their graves. Bergeon's method, by rectal injections of hydrogen-sulphide and the pneumatic cabinet, have been abandoned. Prof. Flint advocates inhalation of creasote, but his observations have not been confirmed by others.

Selected Articles.

DISINFECTION AND DISINFECTANTS.

(Concluded.)

FURNITURE AND ARTICLES OF WOOD, LEATHER, AND PORCELAIN.

Washing, several times repeated, with:

1. Solution of carbolic acid, 2 per cent.

FOR THE PERSON.

The hands and general surface of the body of attendants of the sick, and of convalescents, should be washed with:

1. Solution of chlorinated soda diluted with nine parts of water, 1 : 10.
2. Carbolic acid, 2 per cent. solution.
3. Mercuric chloride, 1 : 1,000.

FOR THE DEAD.

Envelop the body in a sheet thoroughly saturated with:

1. Chloride of lime in solution, 4 per cent.
2. Mercuric chloride in solution, 1 : 500.
3. Carbolic acid in solution, 5 per cent.

FOR THE SICK-ROOM AND HOSPITAL WARDS.

(*a*) While occupied, wash all surfaces with:

1. Mercuric chloride in solution, 1 : 1,000.
2. Carbolic acid in solution, 2 per cent.

(*b*) When vacated, fumigate with sulphur dioxide for twelve hours, burning at least three pounds of sulphur for every 1,000 cubic feet of air-space in the room; then wash all surfaces with one of the above-mentioned disinfecting solutions, and afterward with soap and hot water; finally throw open doors and windows, and ventilate freely.

FOR MERCHANDISE AND THE MAILS.

The disinfection of merchandise and the mails will only be required under exceptional circumstances; free aeration will usually be sufficient. If disinfection seems necessary, fumigation with sulphur dioxide will be the only practicable method of accomplishing it without injury.

RAGS.

(*a*) Rags which have been used for wiping away infectious discharges should at once be burned:

(*b*) Rags collected for the paper-makers during the prevalence of an epidemic should be disinfected before they are compressed in bales, by:

1. Exposure to super-heated steam of 105° C. (221° Fahr.) for ten minutes.
2. Immersion in boiling water for half an hour.

SHIPS.

(*a*) Infected ships at sea should be washed in every accessible place, and especially in the localities occupied by the sick, with:

1. Solution of mercuric chloride, 1 : 1,000.
2. Solution of carbolic acid, 2 per cent.

The bilge should be disinfected by the liberal use of a strong solution of mercuric chloride.

(*b*) Upon arrival at a quarantine station, an infected ship should at once be fumigated with sulphurous acid gas, using three pounds of sulphur for every 1,000 cubic feet of air-space; the cargo should then be discharged on lighters; a liberal supply of the concentrated solution of mercuric chloride (4 oz. to the gallon) should be thrown into the bilge, and at the end of twenty-four hours the bilge-water should be pumped out and replaced with pure sea-water: this should be repeated. A second fumigation, after the removal of the cargo, is recommended; all accessible surfaces should be washed with one of the disinfecting solutions heretofore recommended, and subsequently with soap and hot water.

FOR RAILWAY CARS.

The directions given for the disinfection of dwellings, hospital wards, and ships, apply as well to infected railway cars. The treatment of excreta with a disinfectant, before they are scattered along the tracks, seems desirable at all times, in view of the fact that they may contain infectious germs. During the prevalence of an epidemic of cholera this is imperative. For this purpose the standard solution of chloride of lime is recommended.

At the annual meeting of the Sanitary Council of the Mississippi Valley, held in New Orleans, La., March 10, 11, 1885, the following resolution was adopted:

Resolved—That the Secretary request from the chairman of the Committee on Disinfectants, appointed at the

last meeting of the American Public Health Association, a plain, practical paper on "Disinfection and Disinfectants," for popular use and distribution, to be furnished to the chairman or the special committee of this council on General Sanitation.

In compliance with this request a Preliminary Report was prepared, which has been quite widely circulated. This report having been made before the experimental researches of the committee were completed, and being a "Preliminary Report," was only intended to serve a temporary purpose; but it has been thought best to revise it, and to introduce it into this our final report, so that it may be available for distribution in a separate form, if sanitary officials find it suitable for popular use.

DISINFECTION AND DISINFECTANTS.

The object of disinfection is to prevent the extension of infectious diseases by destroying the specific infectious material which gives rise to them. This is accomplished by the use of disinfectants.

There can be no partial disinfection of such material: either its infecting power is destroyed, or it is not. In the latter case there is a failure to disinfect. Nor can there be any disinfection in the absence of infectious material. It has been proved for several kinds of infectious materials, that its specific infecting power is due to the presence of living microörganisms, known in a general way as "disease germs"; and practical sanitation is now based upon the belief that the infecting agents in all kinds of infectious material are of this nature. Disinfection, therefore, consists essentially in the destruction of disease germs.

Popularly, the term disinfection is used in a much broader sense. Any chemical agent which destroys or masks bad odors, or which arrests putrefactive decomposition, is spoken of as a disinfectant. And in the absence of any infectious disease it is common to speak of disinfecting a foul cesspool, or bad smelling stable, or privy vault. This popular use of the term has led to much misapprehension, and the agents which have been found to destroy bad odors—deodorizers—or to arrest putrefactive decomposition—antiseptics—have been confidently recommended and extensively used for the destruction of disease germs in the excreta of patients with cholera, ioid fever, etc.

he injurious consequences which are likely to lt from such misapprehension and misuse of word disinfectant, will be appreciated when it own that recent researches have demonstrated many of the agents which have been found ul as deodorizers, or as antiseptics, are en- y without value, for the destruction of dis- erms. This is true, for example, as regards the sulphate of iron or copperas, a salt which has been extensively used with the idea that it is a valuable disinfectant. As a matter of fact, sulphate of iron in saturated solution does not destroy the vitality of disease germs, or the infecting power of material containing them. This salt is, nevertheless, a very valuable antiseptic, and its low price makes it one of the most valuable agents for the arrest of putrefactive decomposition.

Antiseptic agents, however, exercise a restraining influence upon the development of disease germs, and their use during epidemics is to be recommended when masses of organic material in the vicinity of human habitations cannot be completely destroyed, or removed, or disinfected.

While an antiseptic agent is not necessarily a disinfectant, all disinfectants are antiseptics; for putrefactive decomposition is due to the development of "germs" of the same class as that to which disease germs belong, and the agents which destroy the latter also destroy the bacteria of putrefaction when brought in contact with them in sufficient quantity, or restrain their development when presented in smaller amounts. A large number of the proprietary "disinfectants," so-called, which are in the market, are simply deodorizers or antiseptics, of greater or less value, and are entirely untrustworthy for disinfecting purposes.

Antiseptics are to be used at all times when it is impracticable to remove filth from the vicinity of human habitations, but they are a poor substitute for cleanliness. During the prevalence of epidemic diseases, such as yellow fever, typhoid fever, and cholera, it is better to use in privy-vaults, cess-pools, etc., those antiseptics which are also disinfectants, *i.e.*, germicides; and when the contents of such receptacles are known to be infected, this becomes imperative.

Still more important is the destruction at our seaport quarantine stations of infectious material which has its origin outside of the boundaries of the United States, and the destruction within our boundaries, of infectious material given off from the persons of those attacked with any infectious disease, whether imported or of indigenous origin.

In the sick-room we have disease germs at an advantage, for we know where to find them as well as how to kill them. Having this knowledge, not to apply it would be criminal negligence, for our efforts to restrict the extension of infectious diseases must depend largely upon the proper use of disinfectants in the sick-room.

GENERAL DIRECTIONS.

Disinfection of Excreta, etc. The infectious character of the dejectious of patients suffering from cholera and from typhoid fever is well established; and this is true of mild cases and of the earliest stages of these diseases as well as of

severe and fatal cases. It is probable that epidemic dysentery, tuberculosis, and perhaps diphtheria, yellow fever, scarlet fever, and typhus fever, may also be transmitted by means of the alvine discharges of the sick. It is therefore of the first importance that these should be disinfected. In cholera, diphtheria, yellow fever, and scarlet fever, all vomited material should also be looked upon as infectious. And in tuberculosis, diphtheria, scarlet fever, and infectious pneumonia, the sputa of the sick should be disinfected or destroyed by fire. It seems advisable also to treat the urine of patients sick with an infectious disease with one of the disinfecting solutions below recommended.

Chloride of lime, or bleaching powder, is perhaps entitled to the first place for disinfecting excreta on account of the rapidity of its action. The following standard solution is recommended:

Dissolve chloride of lime of the best quality in pure water, in the proportion of six ounces to the gallon.

Use one quart of this solution for the disinfection of each discharge in cholera, typhoid fever, etc. Mix well, and leave in the vessel for at least one hour before throwing into privy-vault or water-closet. The same directions apply for the disenfection of vomited matters. Infected sputum should be discharged directly into a cup half-full of the solution. A 5 per cent. solution of carbolic acid may be used instead of the chloride of lime solution, the time of exposure to the action of the disinfectant being four hours.

Disinfection of the person. The surface of the body of a sick person, or of his attendants, when soiled with infectious discharges, should be at once cleansed with a suitable disinfecting agent. For this purpose solution of chlorinated soda (liquor sodæ chlorinatæ) diluted with nine parts of water, or the standard solution of chloride of lime diluted with three parts of water, may be used. A 2 per cent. solution of carbolic acid is also suitable for this purpose, and under proper medical supervision the use of a solution of corrosive sublimate—1:1,000—is to be recommended.

In diseases like small-pox and scarlet fever, in which the infectious agent is given off from the entire surface of the body, occasional ablutions with the above mentioned solution of chlorinated soda are recommended.

In all infectious diseases the body of the dead should be enveloped in a sheet saturated with the standard solution of chloride of lime, or with a 5 per cent. solution of carbolic acid, or a 1:500 solution of corrosive sublimate.

Disinfection of clothing. Boiling for half an hour will destroy the vitality of all known disease germs, and there is no better way of disinfecting clothing or bedding which can be washed than to put it through the ordinary operations of the laundry. No delay should occur, however, between the time of removing soiled clothing from the person or the bed of the sick and its immersion in boiling water, or in one of the following solutions until this can be done:

Corrosive sublimate one drachm to the gallon of water (about 1:1,000), or,

Carbolic acid, pure, one ounce to the gallon of water (1:128).

The article to be disinfected must be thoroughly soaked with the disinfecting solution and left in it for at least two hours, after which they may be wrung out and sent to the wash.

N. B. Solutions of corrosive sublimate should not be placed in metal receptacles, for the salt is decomposed and the mercury precipitated by contact with copper, lead, or tin. A wooden tub or earthen crock is a suitable receptacle for such solutions.

Clothing or bedding which cannot be washed should be disinfected by steam in a properly constructed disinfection chamber. In the absence of a suitable steam disinfecting apparatus, infected clothing and bedding should be burned.

Disinfection of the sick-room. In the sick-room no disinfectant can take the place of free ventilation and cleanliness. It is an axiom in sanitary science that it is impracticable to disinfect an occupied apartment, for the reason that disease germs are not destroyed by the presence in the atmosphere of any known disinfectant in respirable quantity. Bad odors may be neutralized, but this does not constitute disinfection in the sense in which the term is here used. These bad odors are, for the most part, an indication of want of cleanliness, or of proper ventilation; and it is better to turn contaminated air out of the window or up the chimney than to attempt to purify it by the use of volatile chemical agents, such as carbolic acid, chlorine, etc., which are all more or less offensive to the sick, and are useless so far as disinfection—properly so called—is concerned.

When an apartment which has been occupied by a sick person with an infectious disease has been vacated, it should be disinfected. The object of disinfection in the sick-room is mainly the destruction of infectious material attached to surfaces, or deposited as dust upon window ledges, in crevices, etc. If the room has been properly cleansed and ventilated while still occupied by the sick person, and especially if it was stripped of carpets and unnecessary furniture at the outset of his attack, the difficulties of disinfection will be greatly reduced.

All surfaces should be thoroughly washed with the standard solution of chloride of lime diluted with three parts of water, or with 1:1,000 solution of corrosive sublimate. The walls and ceiling, if plastered, should be subsequently treated with lime-wash. Especial care must be taken to was

away all dust from window ledges and other places where it may have settled, and thoroughly to cleanse crevices and out-of-the-way places. After this application of the disinfecting solution, and an interval of twenty-four hours or longer for free ventilation, the floors and wood-work should be well scrubbed with soap and hot water, and this should be followed by a second, more prolonged exposure of fresh air, admitted through open doors and windows.

As an additional precaution, fumigation with sulphurous acid gas is to be recommended, especially for rooms which have been occupied by patients with small-pox, scarlet fever, diphtheria, typhus fever and yellow fever. But fumigation with sulphurous acid gas alone, as commonly practised, cannot be relied upon for disinfection of the sick-room and its contents, including bedding, furniture, infected clothing, etc., as is popularly believed.

When fumigation is practised, it should precede the general washing with a disinfecting solution heretofore recommended. To ensure any results of value, it will be necessary to close the apartment to be disinfected as completely as possible by stopping all apertures through which the gas might escape, and to burn not less that three pounds of sulphur for each thousand cubic feet of air space in the room. To secure complete combustion of the sulphur, it should be placed in powder or in small fragments, in a shallow iron pan, which should be set on a couple of bricks in a tub partly filled with water, to guard against fire. The sulphur should be thoroughly moistened with alcohol before igniting it.

Disinfection of privy vaults, cesspools, etc. When the excreta (not previously disinfected) of patients with cholera or typhoid fever have been thrown into a privy vault, this is infected, and disinfection should be resorted to as soon as the fact is discovered, or whenever there is reasonable suspicion that such is the case. It will be advisable to take the same precautions with reference to privy vaults into which the excreta of yellow fever patients have been thrown, although we do not definitely know that this is infectious material.

For this purpose the standard solution of chloride of lime may be used in quantities proportioned to the amount of material to be disinfected, but where this is considerable it will rarely be practicable to sterilize the whole mass. A liberal and repeated use of this solution, or of a 5 per cent. solution of carbolic acid will, however, disinfect the surface of the mass, and is especially to be recommended during the epidemic prevalence of typhoid fever or of cholera.

All exposed portions of the vault, and the wood-work above it, should be thoroughly washed down with the disinfecting solution. Instead of the disinfecting solutions recommended, chloride of lime in powder may be daily scattered over the contents of the privy vault.

Disinfection of ingesta. It is well established that cholera and typhoid fever are very frequently, and perhaps usually, transmitted through the medium of infected water or articles of food, and especially milk. Fortunately we have a simple means at hand for disinfecting such infected fluids. This consists in the application of heat. The boiling temperature maintained for half an hour kills all known disease germs. So far as the germs of cholera, yellow fever, and diphtheria are concerned, there is good reason to believe that a temperature considerably below the boiling point of water will destroy them. But in order to keep on the safe side, it is best not to trust anything short of the boiling point (212° F.) when the object is to disinfect food or drink which is open to the suspicion of containing the germs of any infectious disease.

During the prevalence of an epidemic of cholera it is well to boil all the water for drinking purposes. After boiling, the water may be filtered, if necessary to remove sediment, and then cooled with *pure* ice if desired.—*Jour. Am. Med. Assoc.*

DISEASES WITH PERSONAL NAMES.

The *Union Médicale du Nord-Est* publishes in its last issue a very interesting article from the *Gazette Médicale, de Strasborg*, in which the writer points out the inconveniences resulting from the use of personal names in the designation of diseases. He terminates his article with a list of these names, which we place before our readers :

Addison's disease. Suprarenal cachexia; bronzed skin disease.

Addison's keloid (or cheloid). Cancroid, or Morphew.

Alibert's disease. Fungoid mycosis.

Aran-Duchenne's disease. Progressive muscular atrophy.

Astley Cooper's hernia. Crural hernia involving the superficial fascia.

Argyll-Robertson's sign. Absence of pupilar reflex.

Basedow's disease. Exophthalmic goitre.

Bazin's disease. Buccal psoriasis.

Béclard's hernia. Hernia across the saphena.

Bell's paralysis. Paralysis of seventh pair.

Bergeron's disease. Localized rhythmic chorea.

Boudin's law. Antagonism of impaludism and tuberculosis.

Boyer's cyst. Sub-hyoiden cyst.

Bright's disease. Nephritis (albuminous).

Brown-Sequard's syndrome. Hemiparaplegia with hemianesthesia of the opposite side.

Cazenave's lupus. Erythematous lupus.

Charcot's disease. Ataxic arthropathy.

Cheyne-Stokes' respiration. Uræmic resp.

Cloquet's hernia. Perineal hernia.

Colles' law. Non-infection of the mother by her syphilitic child.

Corrigan's disease. Aortic insufficiency.

Corvisart's facies. Asysystolic facies.

Cruveilhier's disease. Simple ulcer of the stomach.

Donder's glaucoma. Simple atrophic glaucoma.

Dressler's disease. Paroxysmal hemoglobinuria.

Dubini's disease. Electric chorea.

Duchenne's disease. Locomotor ataxia.

Duchenne's paralysis. Pseudo-hypertrophic paralysis.

Duhring's disease. Herpetiform dermatitis.

Dupuytren's disease. Retraction of the palmar aponeurosis.

Dupuytren's hydrocele. Hydrocele interna.

Eichstedt's disease. Pityriasis versicolor.

Erasmus Wilson's disease. Generalized exfoliating dermatitis.

Erb's paralysis. Radicular paralysis of the brachial plexus.

Erb-Charoot's disease. Spasmodic dorsal tabes.

Fouchard's disease. Alveo-dental periostitis.

Friederich's disease. Hereditary locomotor ataxia.

Gerlier's disease. Paralytic vertigo.

Gilbert's pityriasis. Pityriasis rubra.

Gibbon's hydrocele. Hydrocele with hernia.

Gilles de la Tourette's disease. Motor incöordination with acholia and coprostasis.

Goyrand's hernia. Interstitial inguinal hernia.

Grave's disease. Exophthalmic goitre.

Graefe's (von) sign. Dissociation of movement between the globe of the eye and the upper eyelid.

Guyon's sign. Fluctuation on renal succussion.

Harley's disease. Paroxysmal hemoglobinuria.

Heberden's rheumatism. Rheumatism of the small joints, with nodes.

Hebra's disease. Polymorphous erythema.

Hebra's pityriasis. Chronic pityriasis rubra.

Hebra's prurigo. True idiopathic prurigo.

Henoch's purpura. Purpura with intestinal symptoms.

Heselbach's hernia. Crural hernia; multilocular sac.

Hippocratic face. Facies cadaverica.

Hodgkin's disease. Adenia; lymphadenoma.

Hodgson's disease. Atheroma of the aorta.

Huguier's disease. Uterine fibro-myoma.

Hutchinson's tooth. Syphilitic tooth (semilunar and notched on the free border).

Hutchinson's triad. The notched tooth; interstitial keratitis and hereditary syphilitic otitis.

Jacob's ulcer. Cancroidal ulcer.

Jacksonian epilepsy. Partial epilepsy.

Kopp's asthma. Thymic asthma; spasm of the glottis.

Kaposi's disease. Xeroderma pigmentosum.

Kronlein's hernia. Inguinal properitoneal hernia.

Laennec's cirrhosis. Atrophic cirrhosis.

Landry's disease. Acute ascending paralysis.

Laugier's hernia. Hernia across Gimbernat's ligament.

Leber's disease. Hereditary optic atrophy.

Levret's law. Marginal insertion of the cord in placenta prævia.

Littre's hernia. Diverticular hernia.

Ludwig's angina. Infectious sub-hyoiden phlegmon.

Mallassez's disease. Cystic disease of the testicle.

Menière's disease. Labyrinthine vertigo.

Millar's asthma. Stridulous laryngitis.

Morand's foot. Foot with eight toes.

Morvan's disease. Analgesic paresis of the extremities.

Paget's disease Pre-cancerous eczema of the nipple.

Paget's disease. Hypertrophic osteitis deformans.

Parrot's disease. Syphilitic pseudo-paralysis.

Parrot's sign. Dilatation of the pupil by pinching the skin (meningitis.)

Parkinson's disease. Paralysis agitans.

Parry's disease. Exophthalmic goitre.

Pavy's disease. Intermittent albuminuria.

Petit's hernia. Lumbar hernia.

Pott's aneurism. Aneurism by anastomosis.

Pott's fracture. Fracture of the fibula by divulsion.

Pott's disease. Vertebral osteitis.

Raynaud's disease. Symmetrical strangulation of the extremities.

Reclus' disease. Cystic disease of the mamma.

Richter's hernia. Parietal enterocele.

Rivolta's disease. Actinomycosis.

Romberg's sign. Vacillation of ataxic patients in the dark.

Rosenbach's sign. Abolition of the abdominal reflex.

Sœmisch's ulcer. Infectious ulcer of the cornea

Stork's blenorrhœa. Blenorrhœa of the superior respiratory passages.

Stokes' law. Paralysis of the muscles subjacent to the inflamed serous and mucous membranes.

Sydenham's chorea. Common chorea.

Thomsen's disease. Muscular spasm at the commencement of voluntary movements.

Thornwald's disease. Inflammation of the pharyngeal gland of Luschka.

Velpeau's hernia. Crural hernia in front of vessels.

Volkmann's deformity. Congenital tibiotarsal luxation.

Wardrop's malady. Malign onyxis.

Weil's disease. Abortive typhus with icter

Wells' facies. Ovarian facies.

Werlhoff's disease. Purpura hemorrhagica.

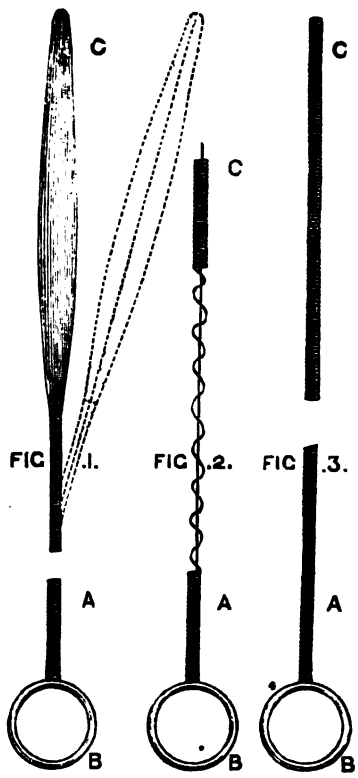
Westphall's sign. Abolition of the rotulian reflex.

Willan's lupus. A tuberculous form of lupus.

Winckel's disease. Pernicious cyanosis of the new-born infant.—*Le Prog. Méd. N. Y. Med. Abstr.*

A NEW METHOD OF TREATMENT FOR ENDOMETRITIS AND ENDO-CERVICITIS BY MEANS OF MEDICATED BOUGIES.

Whilst the several forms of chronic inflammation included under the above heading are amongst the commonest kinds of uterine disease which come under general hospital treatment, they are also amongst those in which the result of that treatment is the least satisfactory. Nor do they fare any better in private practice, when perhaps greater attention can be paid to individual cases than is possible in the out-patient room of a hospital, so that they often come, and not altogether unjustly, to be classed amongst the often-spoken-of *opprobia medicinæ*. Various reasons may be given for this. First, there is sometimes a certain sense of inaccessibility surrounding the uterus when the question of local treatment of its interior comes under consideration. Then, again, it is to be feared that there are still a few who regard disease of the female pelvic organs as a something almost apart from general surgery as dominated by the ordinary laws of physiology and pathology, who cannot bring themselves to look upon an inflammation of the lining membrane of the uterus by the same light as that with which they would view, say, an inflammation of the urethra in the male. Above and beyond all this, there is the difficulty, even the impossibility, of obtaining for the organ in question any near approach to that first and most important element in the treatment of inflammation, upon which Hunter insisted and Hilton discoursed so eloquently—physiological rest. In the case of the uterus, the ever-recurring phenomena attendant upon ovulation, the congestion of the pelvic organs accompanying sexual intercourse, and probably, though to a lesser extent, sexual emotion, will render the attainment of even comparative rest a matter of the greatest difficulty. Not, in-
d, that the uterus is singular amongst the vis-
a in this respect, but with it the difficulty is
haps better exemplified than with any other.
These things being so, any attempt to simplify
render more effectual the treatment of such
es would seem to be justifiable, and, with that
in view, I wish to call attention to a metho.
applying local remedies to the mucous mem-
ne of the uterus by means of bougies, which I
been using for some little time past in my out-patient room. The accompanying sketches of the bougies will need but few words of explanation.* (Figs. 1, 2, 3.) The instrument is made of a single piece of fine spiral wire similar to that used for urethral "antrophores." The stem, five inches and a half in length, is stiffened so that it can be bent to any angle required, and so that by it the medicated portion may be guided into the uterus. The medicated portion, an inch and a half in length, contains stiffening only in its first half-inch, and may be coated with any drug that the fancy of the practitioner, or the needs of the case may indicate. The ones which I have myself used have been coated with one of the following: iodo-



form, 20 per cent.; argentic nitrate, 2 per cent.; thallin sulphate, 5 per cent. I am also hoping to get a satisfactory bougie prepared containing pure iodine. Other drugs that will at once suggest themselves as appropriate to the purpose are zinc and cupric sulphates, alum, tannin, and plumbic subacetate. The medicated spiral wire portion possesses the qualities of pliancy and softness, combining with them, however, sufficient stiffness to render its guidance into the body of the uterus a matter of ease in most cases. The bougie is passed up the os through a Fergusson's or bivalve specu-

* For the ordinary run of cases a bougie of somewhat smaller size than that depicted will be found convenient.

lum, the stem being first bent just below its upper termination so as to adapt the instrument, more or less, to the utero-vaginal curve. Before being used, the medicated portion is dipped into cold water in order to remove the powdered talc with which it is coated externally; its action will also be rendered more efficient if the cervical canal is well cleaned out as a preparatory step. The instrument is left in position for from fifteen to twenty minutes, by the end of which time the medicated coating will have dissolved. It is then withdrawn, by the patient herself if necessary, and the recumbent position is to be continued as long as may be convenient, an hour or more if possible, so that the application may remain in contact with the uterine mucous membrane sufficiently long to be productive of benefit.

The frequency with which these bougies are to be used will vary with individual cases, and according to the nature of the coating of the bougie. When iodoform is used, one bougie a day may be passed in most cases; with nitrate of silver, especially if a stronger percentage than that mentioned above be used—as it often might be with advantage—every second or third day will be sufficient. In connection with the bougies, other curative measures may of course be adopted: local depletion by puncture about the os, or by means of vaginal glycerine pledgets of cotton wool; painting of epithelial erosions of the vaginal portion of the cervix, when present, with tincture of iodine or nitric-acid. With respect to the passage of the bougies, however, in some cases a difficulty will arise from smallness of the os and narrowness of the cervical canal. The commonest cases, in my practice at any rate, are those dating from childbirth, either endo-metritis and endo-cervicitis combined, or the latter alone. In such cases the canal is of fair size, and the os usually patulous, and so, as noted before, the bougie can be passed with ease. But in another important clinical group of cases—viz., those occurring chiefly amongst nulliparous married women and reputed virgins, in whom, nevertheless, I believe that the metritis is most frequently but the upward march of gonorrhœal vaginitis—a different condition of things prevails. Here the fundal inflammation is more marked than the cervical; the vaginal portion of the cervix will be seen to be swollen and congested, the os itself small. The discharge, flowing freely from the os as the Fergusson's speculum is pushed home, instead of presenting the viscid opaque characteristics of abnormal cervical secretion, will be comparatively thin and of greenish color, resembling, in fact, the "laudable pus" of the older surgeons, and so indicating the fundus of the uterus as being its principal source. In these cases, then, the smallness of the os will present some difficulty, but in them I have nearly always succeeded in introducing an instrument, after rapid dilatation with a three-bladed dilator if necessary. This preliminary dilatation of an inflamed os is, I believe, in itself more or less of an evil. But what alternative is there? From no drug whatever, administered internally, can we hope to get the slightest relief. The patient's general condition may, it is true, be improved by iron or other tonics, but the disease itself will remain. The inflammation is a local disease, and amenable only to local treatment. If, on the other hand, it be neglected, it too often (though insignificant as far as life itself is concerned) entails an immense amount both of mental and bodily suffering, reducing the patient ultimately to a miserable state of hypochondriasis.

In connection with the foregoing remarks, I wish it to be understood that I do not place any great importance on an exact differential diagnosis between endo-metritis and endo-cervicitis, so far at least as regards treatment. In many cases we can safely infer that the cervical canal is alone affected; but in at least an equal number it is almost impossible to say for certain that the disease is limited to above or to below the os internum; quite impossible to localize a particular spot in the area of the fundus as being alone the seat of inflammation. Examination of the cavity by endoscopy might perhaps give us more precise information on this and other points. This much, however, I think can be said: that after a general inflammation—following gonorrhœal infection, for instance—of the uterine mucous membrane has all but subsided, there is a tendency for the disease to perpetuate itself as chronic cervical catarrh, in the same way that, after acute urethritis, the bulbo-membranous portion of the urethra so often becomes the seat of a chronic indolent ulceration. This tendency of the inflammation to linger in a chronic form about the cervix after it has subsided in the fundus, may perhaps be explained by the normally rugose condition of the lining membrane of the former, and by the abundance of glands and mucous follicles opening on its surface, conditions which together would greatly favor this result

In conclusion, I would claim for the bougies that they possess certain advantages over most of the methods in general use for applying drugs to the interior of the uterus, whether by syringes, insufflators, or ointment repositors. They are easy of introduction, could scarcely be made to inflict mechanical injury on the uterus, and the application used is distributed thoroughly and uniformly throughout its cavity. An additional point in their favor is that they contain the drug required in a very portable and cleanly form, and are always ready for immediate use. When, however, liquid caustics, as nitric or carbolic acid, are required, the bougies are necessarily out of the question. It is also suggested that in midwifery practice the daily passage of an iodoform bougie after parturition would be an efficient means of keeping aseptic the

cavity of the uterus in cases where there are retained shreds of placenta or blood clot, or in other circumstances which might seem to demand unusual precautions. My thanks are due to Messrs. Christy & Co., the makers of the bougies, for the great trouble they have taken to produce an instrument which would fulfil my requirements, and for their liberality in placing a considerable quantity of them at my disposal for use in the hospital.—A. G. R. Foulerton, L.R.C.P., etc., in *Lancet*.

AN IMPROVED METHOD OF MANAGING THE THIRD STAGE OF LABOR, WITH A CRITICISM OF THE THEORY THAT THE PLACENTA IS THEN SEPARATED BY THE UTERINE PAINS.

1. At the beginning of labor the placenta and uterus are together to be considered as made up of the following parts, so far as the question of separation is concerned:

(*a*) *The part to be separated*, comprising amnion, chorion, chorionic villi, intervillous spaces, large-celled layer of serotina.

(*b*) *The line of separation*, lying between the large-celled and small-celled layers of the placenta, and termed the trabecular layer. It is formed chiefly by the persistent fundi of the uterine glands.

(*c*) *The part left behind* after the placenta is separated, and consisting of the small-celled layer with remains of uterine glands, smaller in lumen, set on the uterine muscle.

2. The chorionic villi get their blood-supply from the umbilical arteries of the fœtus. The intervillous spaces have blood poured into them from the maternal circulation, the blood passing by the curling arteries into the spaces, and from these into the uterine sinuses by the slanting veins. The venous supply of the uterus is much more abundant than the arterial.

3. At the trabecular layer we may regard the placental area (that is, uterine surface of separated placenta) and placental site as coinciding during pregnancy, with trabecular layer joining them.

4. Separation of the placenta can only take place when there is disproportion between placental area and placental site.

5. The placenta does not separate during the first and second stages of labor, because all changes in the placental site (diminution during pains and expansion when pain dies off) are accurately responded to by the placenta, owing to the activity of the fœtal and maternal blood-supplies.

During the third stage of labor the fœtal circulation is cut off and the villi are closely pressed together, showing obliteration of intervillous spaces. The increase in placental site following a third-stage pain is not followed up by the placental area, as the placenta is now practically a bloodless structure.

7. The placenta does not separate on diminution of placental site to 4″ x 4″.

8. Any diminution of site below this introduces no relative change at plane of separation. The area of the placental site and the placenta still correspond.

9. A disproportion in area between the placental site and placenta brings about tension on the trabeculæ of the trabecular layer, that is, tears them.

10. This disproportion happens during the third stage in the relaxation following a pain, and therefore separation occurs after the pain. During the relaxation the placental site increases slightly, but the placenta, now bloodless, or nearly so, does not respond; hence disproportion of area.

11. The placenta, when separated, is expelled by the pains either as Duncan or Schultze has figured.

12. All separation of placenta or membranes follow one mechanism—"*Placenta and membranes separate when there is a disproportion at the plane of separation between their area and their site of attachment. This disproportion is only slight, as the trabeculæ are microscopic.*"

The gist of the view advocated is that the placenta separates in third stage after the pains, and is expelled when separated by the pains. The important practical point is that manipulation can not separate the placenta, but can only aid expulsion.

From the above demonstration, Hart has formulated the following rules for the management of the third stage of labor.

1. When the child is born, note that the fundus uteri stands at or below the level of the umbilicus, and that the uterus does not contain a second child. Give an ergotine injection in a multipara at any rate, if labor has been slow.

2. Do not tie the cord until the child has cried freely, and then tie only one ligature.

3. Cut the cord on the placental side of the ligature, and let the placental part of the cord drain thoroughly into any small dish; then tie it, to prevent any staining of the bed linen. Tie a second ligature at once, however, if a second child be present.

4. Before applying the first ligature, it should be thoroughly ascertained by abdominal palpation that the uterus is not so relaxed as to bleed.

5. Continue with the hand on the uterus; do nothing when a good contraction comes on, and allow the uterus its normal relaxation after the pain is over.

6. Should bleeding from the uterus come on, or

should the pains be feeble, than grasp the uterus so as to bring on a contraction to arrest hæmmorrhage.

7. Do nothing further in a normal case until the lessening of the bulk of the uterus shows that the placenta is separated and being expelled; the expulsion may then be aided by "expression."

8. One can tell when the placenta is separated and not driven down by noting that gentle expression drives it down.

The reasons for the above treatment are as follows: Ergotine and manipulation are used to insure good marked retraction and to empty the intervillous spaces well. The fœtal circulation is aspirated thoroughly by allowing the child to cry well, and by draining the cord. These two measures give the necessary disproportion sooner, as the placenta can not now follow up the increase in placental area during relaxation, is made as small in area as possible, and relaxation thus sooner tears the trabeculæ.

Since practising this procedure, Hart has had no difficulty in the normal third stage of labor. Interference is reduced to a minimum, and the membranes expelled intact.—D. Berry Hart in *Ed. Med. Jour.*

MEDICAL NOTES.

A good application for *burns* is the following:

℞.—Salol, ... p. j.
Ol. olivæ, ... p. vj.
Aquæ calcis, ... p. vj. M.

A solution of chromic acid is perhaps the best application to *mucous patches* (*Cinn. Lancet-Clinic*, July 28), especially to those in the mouth and the pharynx. Use from two to five grains to the ounce.

When *constipation exists in women* who menstruate profusely, as in rheumatic subjects, the *Med. Press* says: Equal parts of flowers of sulphur and calcined magnesia, mixed with an equal bulk of cream of tartar, will be found an excellent laxative.

A useful liniment in *neuralgia* is the following:

℞.—Spirit. camphor., . . . p. 90
Æther., ... p. 30
Tinct. opii, ... p. 6
Chloroform., ... p. 20. M.

Apply with a flannel.

A palatable cod-liver oil for children may be prepared as follows (*Am. Pract.*):—

Florida orange wine, . . . ℥ vj.
Cod-liver oil, ... ℥ ij.
Extract of pancreatin . . gr. xx.

Shake thoroughly.

Dr. E. B. Stevens states, in *Obstet. Gazette*, Aug., 1888, that, uniformly, women who have been for some time—say one to two or three years—in the morphine habit, have an entire *arrest of menstruation*, which function is re-established under treatment for the habit.

Another external application for *neuralgia* is the following (*Med Rec.*):—Eau de Cologne, ether and chloroform, f ʒ iij of each, poured on a handkerchief previously wetted with cold water, and placed on the seat of pain, is said to give instantaneous relief. In *nervous headache* it is also efficacious.

Professor Jacqoud (*Brit. Med. Journal*) recommends a copious diluent draught and an exclusive milk diet in the treatment of *gout*: in cases in which there is considerable fever he gives a small quantity of hydrate of bromal. Preparations of colchicine and of salicylate of soda, though excellent as anæsthetics, are to be avoided. In patients affected with insterstitial nephritis these substances produce most serious toxic symptoms.

The oil of turpentine is recommended as an application to all cases involving a *solution of surface continuity from injury* (*Med. Press.*) In severe wounds of the hand or other parts, involving extensive laceration, the oil is said to prevent suppuration and sepsis, and so conduce to rapid recovery. In such cases the parts are well cleansed with hot water, and pledgets of lint steeped in the oil are applied. The dressing is kept saturated with a mixture of two parts of the oil of turpentine and one of linseed oil.—*Col. and Clin. Rec.*

PULMONARY GANGRENE TREATED BY INCISION AND DRAINAGE.

At the meeting of the Clinical Society of London, held October 12, 1888, Dr. Pasteur read a case of "Pulmonary Gangrene treated by Incision and Drainage" (*Lancet*, October 20, 1888). The patient was a delicate-looking boy, aged 7. His illness was insidious in the onset, but had developed rapidly. On the morning before admission to the North-Eastern Hospital for Children he coughed up a quantity of bright blood, and his mother noticed that his breath had become very offensive. On admission ten days after the onset he was febrile, with thickly-coated tongue, quickened breathing, and gangrenous fetor of breath. Over the right upper lobe were impaired resonance, weak tubular breath sounds, and diminished vocal conduction. During the next three weeks cavernous signs developed at the right apex, and the remainder of the right lung became pneumonic. The temperature ranged between 100° and 103.6°. He spat up daily from two to four ounces of offensive watery fluid, mostly saliva. The boy was sub

quently operated on by Mr. Pollard. The cavity was incised at the anterior extremity of the right second space, one inch from the sternum. Large quantities of gangrenous lung and putrid fluid were expelled through the wound. The cavity reached down to the sixth rib. A counter-opening was made in the sixth space, flanged tubes inserted, and a blue wool dressing applied. Next morning the child was much relieved, nearly free from cough, expectorating small quantities of frothy sputum almost free from odor, and practically free from pain, which had hither to be enamost distressing symptom. The cavity was washed out daily once or twice as occasion required. At the end of a week the washings deposited a copious sediment of pus. The improvement, however, was not maintained. The temperature, pulse, and respirations remained high, fetor of breath re-appeared on the tenth day, and the patient sank rapidly three days later. A huge cavity occupied the anterior third of the right lung. It was lined for the most part with a thin layer of granulation-tissue. At the inner margin the necrotic process had invaded the pericardium and set up acute pericarditis. The œsophagus was firmly adherent to the right bronchus, and a narrow sinus, about three-quarters of an inch long, led from a minute valve-like opening in the œsophagus to a small ragged opening in one of the main divisions of the right bronchus. There were no signs of tubercle or of caseating or suppurating bronchial glands. The gangrene was undoubtedly due to the passage from the œsophagus into the lung of some irritative material (probably decomposing foodstuffs) along the sinus above mentioned. Whether this sinus was the remains of a glandular abscess or was caused by the passage of some pointed foreign body from the œsophagus was doubtful. The limitation of the gangrene of the anterior region of the lung, and the implication of all three lobes in a single cavity, were worthy of notice. Pericarditis appeared to be a rare complication of pulmonary gangrene. The indications for surgical interference were sufficiently clear,—viz., imperfect communication of the gangrenous area with the bronchi, failure of expectant treatment, and signs of a cavity in an accessible situation. The amount of repair which took place under unfavorable circumstances was very encouraging. An earlier operation might have saved the life of the patient.

[r. Godlee mentioned a case of gangrenous ity at the apex of one lung, which was op ned drained; the pleura was not adherent, necesting the sewing of the pulmonary to the costal ira before the abscess was opened. The child l in two days, and then it was found that aner gangrenous cavity existed in the opposite lung.

r. Broadbent said he only saw in one case an mpt made to reach a gangrenous cavity in the of the lung; but no relief followed.

Dr. Barlow related a case of gangrenous mediastinal abscess involving the lung by extension, and into which a sinus led from the gullet; probably the gangrene was secondary to perforation of the gullet by a foreign body. In cases of gangrene due to a discharge of a bronchial abscess into a bronchus, the œsophagus has not been in communication with the abscess cavity.—*Therap. Gaz.*

THE INFANT FOOD PROBLEM.

In the January issue is a very interesting and useful paper on this subject, taken from *The Sanitarian*. We now copy from the same source the following leading facts obtained in reply to questions on this subject, submitted to Dr. Eustace Smith, of London; Dr. J. Lewis Smith, of New York; Dr. Victor C. Vaughan, of Ann Arbor, Mich.; Dr. George H. Rohé, of Baltimore; Dr. F. Forchheimer, of Cincinnati; and others.

1. In the case of an infant, or a child under ten months of age, deprived of breast-milk, the artifical substitute provided should be made to correspond with human milk as closely as possible, both in its chemical constitution and in its physical characters.

2. Fresh, unadulterated cows' milk, when properly prepared, is an acceptable substitute for breast-milk. But since the casein of cows' milk coagulates in a heavy, dense mass, white breast-milk curd is light and flocculent, some expedient must be resorted to in order to make the former resemble the latter, so that the digestive powers of the infant shall not be unduly taxed. The casein of cows' milk, accerding to Dr. Eustace Smith, as the rule, traverses the infant's alimentary tract and may be found unchanged in the fæcal discharges. It is therefore a constant source of irritation, and often gives rise to diarrhœa and entero-colitis. One of the most decided advances in dietetics in modern times, is the preparation of cows' milk with the aid of digestive agents, as in the method recommended by Professor Frankland. In this method the casein of a portion of the milk is first peptonized by fresh calves' rennet, and to this is added a portion of fresh milk, after heat has been applied to check the process and to prevent complete predigestion; some milk-sugar is finally added, and thus a mixture is obtained which closely approximates human milk in its chemical composition. It has, however, been found to serve as an efficient substitute, where the mother's milk is of poor quality, is inadequate in quantity, or is entirely wanting. The special feature of this method is the peptonizing of only a part of the casein, with the employment of heat at a certain stage to arrest the process so that the food shall not be completely digested. The addition of the carbo-hydrate (milk-sugar in this case) is necessary,

in order that the food shall closely resemble human milk. The employment of stale, foul-smelling, partially decomposed digestive ferments, for the purpose of preparing cows' milk for infants' food is condemned. The necessary skill and intelligence required to insure uniformity of result for the extemporaneous peptonizing of milk is rarely to be found in the household, and where this process is adopted, the experiment often turns out to be unfortunate and injurious to the child.

3. As a rule, raw starch is inadmissible in the diet of young infants, because the digestive powers of the infant are rarely sufficiently active to convert crude starch into a soluble form. The plan advocated by some, of adding the starch to the milk in order to mechanically break up the curd, is unphysiological and very objectionable. The products of the complete digestion of starch are glucose and saccharose (maltose), and these, in various forms have been recommended to be used as additions to the milk, under the name of "Liebig Foods." When in excess, these substances cause diarrhœa, and when given alone do not sufficiently nourish the child. Dr. J. Lewis Smith speaks favorably of dextrine, which is a partially digested starch, as a good substitute for glucose and saccharose in such artificial foods. The fact cannot be too strongly insisted upon, which is taught both by clinical experience and by physiological investigation, that the food of either infants or adults, except in special emergencies, should never be fully predigested, for fear of permanently weakening or destroying the digestive functions of the stomach.

4. A great part of the large mortality of infants in all our cities is due to the bad quality of the milk supply, particularly that going to the poorer classes. Professor Vaughan declares that many deaths from so-called cholera-infantum are really caused by milk containing tyrotoxicon. Authorities are almost unanimous upon the point that in large cities, at least during hot weather, all milk for the nursing bottle should be boiled several times a day, in order to destroy ferment-germs It is better, at such times, that the food should be freshly prepared for each feeding. In some cases, owing to the variability in the quality of the milk supply, it may be advisable to resort, for a short time, to condensed or evaporated milk; in either case diluting and adding cream, or an equivalent, soluble carbo-hydrate, in order to make an artificial breast-milk. Desiccated partly peptonized milk, in the form of a milk food, containing partly converted starch (soluble starch and dextrine), and a small quantity of lactose is a convenient (and when well made, a very efficient) substitute for the mother's milk.

5. Where a child is a premature birth, or is feeble from other causes, as great care should be observed in preparing its food as in prescribing its medicine. Experience has demonstrated that success in infant-feeding is dependent upon the ability to individualize the patient, and to select the proper food for each case. For very delicate infants the mother's milk is often found not only inadequate to properly nourish the child, but also positively injurious. This is generally admitted where same obvious dyscrasia exists, as the tuberculous or syphilitic. It is a fact that in such feeble infants artificial mixtures can be made which will agree with the weak digestive functions and satisfactorily nourish the child.

SOME DERMATOLOGICAL DON'TS.

Don't make your diagnosis from the history of a case, because if you do you will often be led astray. Make it from the eruption that you see, and then substantiate or destroy this by the history of the case, if you will.

Don't fail to think of the possibility of every case being either syphilis or eczema; and

Don't fail to master these two diseases as thoroughly as possible; because, if you learn to recognize these two, you will have gone a long way in diagnosis. If they can be excluded, then the field of possible "might be's" is considerably narrowed.

Don't make the diagnosis of syphilis on account of a syphilitic history, because you can often get a history of syphilis in a non-syphilitic case.

Don't expect much, if any, history of syphilis in a woman, because you very frequently will not get it. This is not because they are "gay deceivers," but because in them the early symptoms of the disease are often so slight that they are not observed by them.

Don't throw out the diagnosis of syphilis on account of an eruption itching, because some syphilides, especially the papular variety, do itch at times. The *not* itching of an eruption is better presumptive evidence of syphilis than is itching positive evidence against it.

Don't make the diagnosis of lichen planus from the presence of flat angular papules with depressed centres alone, because identical lesions will at times be met with in eczema, syphilis, and psoriasis.

Don't depend upon getting the bleeding points springing out of the delicate pellicle after carefully scraping off the scales for your diagnosis of psoriasis, because you can produce the same thing in other diseases. In fact,

Don't depend upon any one symptom, but make your diagnosis from the general make-up of the disease as a whole.

Don't forget that many diseases of the skin are dependent upon disturbances in the general health of the patient. Therefore,

Don't fail to inquire into the performance of the

functions of the various organs of the patient, and to put him into as good a physical condition as possible.

Don't tell your patient that it is dangerous to cure his skin disease rapidly, because it is not. If you

Don't know how to treat the case, ask advice of some one who does.

Don't encourage the popular notion that there is danger of an eruption striking in, because it never does.

Don't give arsenic for every skin disease, and, especially,

Don't give it in acute eruptions. Its sphere is in the chronic scaly eruptions, such as chronic psoriasis.

Don't forget that most cases of pruritus are due to internal causes, and that in them external treatment is wasted; and

Don't forget the bed-bug and the pediculus as possible causes of the trouble.

Don't forget that the greatest secret in the treatment of eczema, and many other skin diseases, is not what particular drug or formula is "good for" the disease, but a knowledge of the great principle that acute diseases need soothing remedies, and subacute and chronic diseases need stimulation.

Don't expect to cure an inveterate eczema with thickened skin by means of a soothing ointment, such as that of the oxide of zinc, because you will only waste pour time, and the patient's money.

Don't use tar in an acute eczema, because it is a stimulant, and what we want at this time is to soothe the inflamed skin. It is appropriate to a subacute or chronic case.

Don't allow water to touch any form of eczema, because it always irritates in such a case.

Don't use a thick ointment on the hairy scalp, because it makes a disagreeable mess of the hair, and will not be "popular" with your patient. Even lard is not a pleasant vehicle for such applications. Vaseline and the oils are more elegant excipients.

Don't order the hair to be cut from the head of a young or old woman in any disease of the scalp, because, except in the case of a peculiarly stupid or careless patient, it is never necessary, and always disagreeable to the woman.

Don't allow a patient with ringworm to go to school, because if you do you will be responsible the spread of the disease.

on't pronounce a ringworm case well and in- ble of spreading the contagion until you are that it is well; and

on't be sure about it until there are no more mps" on the scalp, and you can find no more he fungus in the hair.

on't forget to caution a patient to whom you e given chrysarobin, not to touch his face with nds after applying the drug, because if you do you will have either a mad or a frightened patient in your office.

Don't pronounce a patient addicted to the excessive use of alcoholic beverages on account of his having rosacea, because there are lots of other things besides alcohol that will cause it.

Don't use the name "barber's itch" for anything but trichophytosis barbæ, because it is well not to use terms loosely to cover several different diseases.

Don't use chrysarobin on the face or scalp, because it is very apt to cause a good deal of dermatitis with œdema, and to stain the skin a deep mahogany-red.

Don't use the positive pole of the battery for the needle in destroying hair by electrolysis, because if you do you will leave more or less permanent marks in the skin.

Don't apply a sulphur preparation after using a mercurial upon the face, or *vice versa*, because if you do you will raise a fine crop of comedones.

Don't use a camel's hair brush for making applications of corrosive sublimate, because if you do some of the salt will be left on the brush each time it is used, and you will soon have a stronger solution than you bargained for. Always use a little cotton on a wooden toothpick, or a splinter of wood.

Don't allow a fine-toothed comb to be used on the scalp, because it scratches and irritates the scalp.

Don't encourage or advise the use of pomades on the healthy scalp, because they are prone to become rancid, and inflame the scalp. They are also unnecessary if the hygiene of the scalp is properly looked after.

Don't forget that dandruff is the most frequent cause of premature baldness, because, if you remember this, you may be able to prevent the fall of someone's hair for some time. Therefore,

Don't fail to treat every case of dandruff.—Dr. Jackson, *in Med. Rec.*

THE MEDICINAL TREATMENT OF MENSTRUAL DISORDERS.

The treatment of symptoms alone, without regard to the underlying condition, of which the symptoms are but the expression, is often looked upon as unscientific and unworthy of the consideration of the true physician. It is, indeed, unscientific, and were it possible always to discover and remove the cause, it would be equally irrational and unjustifiable. But, unfortunately, we are unable always to act upon this principle. We cannot always discover the cause, and, knowing or suspecting it, we are often unable to remove it. This is noticeably so in regard to menstrual irregularities, especially as occurring in young women.

The general practitioner is often asked to relieve cases of this nature in girls who would never submit to an examination or operation, preferring rather to suffer pain indefinitely than the shame of a physical investigation into the nature of their trouble. In such cases the physician is forced to try the effect of medicinal agents, groping, it may be, in the dark, before insisting upon an examination. Such being the case, it is well to learn what remedies have been found to be of occasional service in relieving symptoms of this nature which are not dependent upon actual organic disease.

In a very practical paper, read before the Connecticut Medical Society, at its annual meeting in 1888, Dr. Gideon C. Segur, of Hartford, presents a general review of the subject, giving the results of his own experience, and quoting the opinions of several prominent gynecologists whom he has consulted. A brief *résumé* of these opinions is all that can be presented here, the reader who may desire a more extended presentation of the subject being referred to the original paper.

Amenorrhœa.—For this condition most of the authorities consulted recommended general tonics, iron, arsenic, and cod-liver oil. Permanganate of potassium, which was at one time so strongly recommended, does not seem to be in much favor, the objection to it being that it is too irritating to the stomach. Manganese was advised by some, and this is the remedy that the author has found to give the most satisfactory results. Most of the salts of this drug, however, cause so much gastric irritation that they cannot be used in most cases, but the binoxide seems to be an exception in this respect, Dr. Segur having used it in many cases with the happiest results, and without seeing any disagreeable effects caused by it. A disagreeable feature of this remedy, in Dr. Mundé's experience, though apparently not in the author's, was its unreliability. It might afford relief at one time, and yet at another, even in the same case, and seemingly under the same conditions, it would fail utterly to bring on the menstrual flow. The lactate of manganese is also free from the irritating action upon the stomach that most of the other salts of the drug exert. Manganese has the reputation of being an abortifacient, hence some caution is necessary in its use as an emmenagogue. But the maximum dose employed by the author is six grains a day, and this is far below that which has been used to produce abortion.

Dysmenorrhœa.—The opinions of the authorities consulted by the author concerning this symptom and its relief were most varied. Some thought no benefit could be obtained by any but operative measures, while others spoke hopefully of many remedies. Among those which seemed to have given most satisfaction to the writers were pulsatilla in three to five-drop doses three times a day; cannabis indica, viburnum, camphor, belladonna, and antipyrine. Dr. Segur found manganese to render good service in these cases also, in many instances. The binoxide was used in doses of six grains per diem. The application of heat, by means of the sitz bath, or douche, was a useful adjuvant to the internal medication.

Menorrhagia.—For this condition the most efficient remedies were found to be ergot, hydrastis, digitalis, sulphuric acid, fluid extract of gossypium, and gallic acid.

It is rather strange to find such a want of unanimity in the recommendations of these different authorities concerning the most efficacious medicinal agents for the relief of menstrual disorders. It is rather discouraging, also, as the number of remedies vaunted as useful in any particular trouble is generally an inverse proportion to its amenability to treatment. Yet, nothwithstanding the discouragements which those who attempt to treat menstrual disorders by drugs often encounter, the physician is many times powerless to treat them in any other way. Dr. Segur has, therefore, rendered good service in collecting the opinions of so many experienced gynecologists, and in giving the results of his own efforts to relieve sufferers of this class, and we hope that the paper will be useful to many who may perhaps be able occasionally to cure some of these disorders by one or other of the remedies mentioned by the author.—*Med. Rec.*

TUBERCULAR MENINGITIS CURED WITH IODOFORM OINTMENT.

Five cases of this disease were subjected to treatment of the kind mentioned in the title of the author's paper, and with gratifying results. Whatever errors there may have been in diagnosis, the author thinks it hardly possible that he could have erred in all five cases, though he admits that a differential diagnosis between tubercular meningitis and the less grave variety, during life, is very difficult. In all of the cases reported, the plan of treatment consisted in first shaving the hairy scalp and then rubbing in upon the skin a quantity of ointment composed of one part iodoform to five of vaseline, the head being then covered with a tarletan hood with an opening from the face. At each daily friction two grams of this ointment were used, and the treatment was continued from nine to thirty-two days. Molesch t first advised the use of iodoform for interu l diseases in 1878, and he successfully treated thr e out of five cases of tubercular meningitis by ap - cations of iodoform collodion to the scalp. Nill z and Souders have also each reported a success l case of this disease treated in the same manne

The author offers the following suggestions ba l upon his experience in this connection :

1. Iodoform which does not contain less th n

96.7 per cent. of acid is nearly insoluble in water and in blood serum, and cannot penetrate the animal economy except through the medium of fatty substances with which it may be combined.

2. It is probable that when it is applied by friction it is received into the subcutaneous adipose tissue, which acts as a vehicle to its transmission. According to Binz, it is broken up, with the liberation of iodine, and this is absorbed and carried along by means of the organic fluids.

3. The iodine, in such cases, will act upon the protoplasm of the cells, both developing and destroying it.

4. This explanation will apply in regard to the treatment of tubercular meningitis by iodoform inunction; in accordance with which the free iodine would be carried by the lymphatics to the surface of the brain.

5. Whatever value be attached to any particular method of rubbing in the iodoform in tubercular meningitis in children, it would seem as if the subject were worthy of the serious attention of the profession.

6. Future experience may show that more rapid results may be obtained by some modification of this method than have thus far been reported. On the other hand, the prolonged use of iodoform is not followed by any accident.—*Arch. of Pediatrics.*

PARALYSIS.

Pilocarpin, gr. 1-10, subcutaneously, two or three times a week. In alcoholic paralysis.

℞. Extract nucis vomicæ, gr. v; ext. gentianæ, gr. 80. Divide into 20 pills, one night and morning. In alcoholic paralysis.

℞. Tinct. cantharidis, dr. iiss; tinct. nucis vomicæ, dr. iiss; aq. dest. ad., oz. ij. One teaspoonful night and morning. In paraplegia.

℞. Ext. ergotæ, fl. dr. iiss; aq. dest. ad., oz. ij. One teaspoonful three times a day. In congestive and menstrual paralysis.

℞. Phosphori, gr. ij; ol morrhuæ, oz. vj. One teaspoonful after each meal. In general paralysis.

℞. Liq. strychniæ P. B., dr. iss; syr. limonis, dr. ij; aq. dest. ad., oz. ij. One teaspoonful three times a day. In general and facial paralysis.

℞. Argenti nitratis, gr. vij; ext. nucis vomicæ, . xij. Divide into 24 pills, one after each meal. locomotor ataxia.

℞. Argenti nitratis; ext. bellaeonnæ, āā gr. ,; ext. gentiaæ q. s. to make 24 pill. One after ch meal. In locomotor ataxia.

℞. Tinct. ferri perchloridi; tinct. nucis vomicæ; d. phosph. dil.; syr. simpl., āā oz. j. A tea- onful in water before each meal. In hemiplegia locomotor ataxia.

℞. Zinci phosphidi, gr. iv; ext. nucis vomicæ, gr. vi; ext. gentianæ, gr. xxiv. Divide into 12 pills, one night and morning. In hysterical paralysis.

℞. Ext. physostigmatis, gr ij; ext. gentianæ, ℈ ij. Divide into 20 pills, one three times a day. In general paralysis, and paralysis of the insane.

℞. Potass. iodidi, gr. j; magnes. sulphat, dr. ij; aq. chloroformi, oz viij. Two tablespoonfuls night and morning. In lead paralysis.

Hyoscyamin, gr. 1-20, subcutaneously, once a day. In general paralysis of the insane.

℞. Sodii iodidi, dr. iiss; tinct. cinchon, dr. v; aq. des. ad., oz. viij. One tablespoonful three times a day. In paralysis following syphilis.—*Med. World.*

THE VALUE OF JABORANDI AND ITS ALKALOIDS IN THE TREATMENT OF BRIGHT'S DISEASE.—The patient was a man of nineteen, who for several months had suffered from some œdema, dyspnœa, and albuminurid. When seen he was propped up in bed, and dropsical from head to foot; his eyelids, which were distended with effusion, completely closed the eyes. His face was livid, and the swollen condition of the cellular tissues of the neck made it almost as broad as his shoulders. He coughed incessantly; there was copious intrathoracic effusion, and the subcutaneous tissue all over the chest was "doughy" to the touch. His abdomen was as big as a barrel, and there was extensive œdema of the genitals. His legs and thighs were enormously swollen, and water was exuding from them. He was passing a very small quantity of urine, which was of a dirty color and loaded with albumen. As a last resource, but without expecting much from it, I determined to try the subcutaneous injection of hydro-chlorate of pilocarpin, and the next day I gave two injections of a quarter of a grain each, one in the morning and the other late in the afternoon. After each dose I covered the patient thickly with blankets. The first effect was a flushing of the face, the saliva was secreted copiously, and within five minutes he broke out into a profuse perspiration. After the first injection he expressed himself as relieved, and he certainly coughed less. On my visiting him the next day, the lad's appearance was improved; he could see out of his eyes; he had passed a fair night, and the dyspnœa was lessened. I continued two injections daily for three or four days, and after each administration he sweated most profusely. I found he became very faint soon after the injection, and to counteract this I gave him a good dose of gin-and-water before the next one, and repeated this each time afterwards, when he never complained of faintness. Vomiting also occurred, once or twice severely, which induced me to lower the dose to one-fifth of

a grain, which I injected daily for nine or ten days. The improvement, which commenced early, was well maintained. At the end of a week he could sit up in bed, the cough was much less, the thoracic effusion had completely subsided, and his arms and neck were becoming less œdematous. The patient longed for my visits, and always expressed himself as feeling better after a "jolly good sweat." At the end of a fortnight his upper parts were free from effusion, but the abdomen was still much distended, and I hardly believed that we could get rid of an accumulation which at one time threatened to rupture the skin, and which it seemed that nothing but tapping would relieve. I then administered one-fifth of a grain on alternate days, and kept this up for another fortnight. He was then passing his usual quantity of urine, the albumen much diminished in quantity; he sat up daily by the fire, and there remained but a little swelling of the abdomen and legs. I continued the injection till the remaining dropsy had subsided. The improvement was maintained, and under a diet of plenty of milk and the administration of iron and convallaria majalis, he was able to go out of doors and enjoy life with comfort.—*Lancet.*

MECHANICAL TREATMENT OF TABES DORSALIS.—A singular method of treating cases of locomotor ataxy has, during the past three months, been tried at the Salpétrière, and the results have been so satisfactory that M. Charcot recently devoted one of his lectures (*Progrès Médical*, Jan. 19th) to the subject, demonstrating the cases so dealt with. The practice is not absolutely novel, since, in 1883, it was brought forward by Motchoukowsky, of Odessa, who claimed that twelve tabetics had been greatly benefited by it, and also that the plan was of use in cases of sexual impotency apart from tabes. Last year, M. Raymond, when on a visit to Russia, heard of the practice, and introduced it to M. Charcot's notice, and, as above said, it has been adopted in M. Charcot's wards during the past three months, the "chef de clinique," M. Gilles de la Tourette, superintending it. It simply consists in suspending the patient by means of Sayre's "jury-mast" for a period beginning with a duration of half a minute and progressively increasing up to three or at the most four minutes, an interval of two days occurring between each suspension. In order to exert greater traction on the spinal column, it is well to raise the arms every fifteen or twenty seconds. Eighteen tabetics have thus been treated, embracing about 400 "suspensions." Excluding four who were not suspended more than three times, the improvement was marked in fourteen, and eight of these most remarkably. They were all confirmed cases, and had mostly been treated by cauterisation along the spine. Almost from the commencement of the suspension treatment the patients would improve in walking—an improvement at first temporary, but after eight or ten suspensions becoming continuous. They could then stand more easily, and walk without assistance. After twenty or thirty suspensions Romberg's symptom disappeared. There was also relief from vesical troubles, when these existed; diminution and even disappearance of lightning pains; return of sexual desire and capacity. Anæsthetic and other sensory disturbances also disappeared, and the general condition of the patient improved, sleep being better, etc One case had a return of lightning pains whilst being treated, but, subsequently, again underwent improvement, which in all the rest was uninterrupted. In no case did the knee-jerk return. or the pupil reaction become normal. The method has also been applied to a few non-tabetic cases, as Frederich's disease, neurasthenia, and disseminated sclerosis; but, as M. Charcot observes, the method is still in the experimental stage. So far the results in tabes are encouraging, whilst the simplicity and harmlessness of the method are additional recommendations for its further trial.—*Lancet.*

THE USE OF ALCOHOL IN MEDICINE.—According to Professor Binz, of Bonn, alcohol in small doses increases the arterial pressure; in large doses the opposite effect is produced. Alcohol increases the activity of the left ventricle of the heart, and diminishes the moments of rest, and increases the respiration. Alcohol in moderate doses is eliminated by the lungs and kidneys. Alcohol burns up into carbonic acid gas, and water taken into the system. This action produces heat, and is of value to temporarily stimulate and strengthen the system. Alcohol does not increase oxidation. Only such substances can be rightly considered as nutritives which promote the heat of the body without producing any injurious accompanying symptoms. It is known that alcohol in large doses increases the decomposition of albumen, and hence, in many cases of severe illness, tends to hasten the fatal result rather than retard it Alcohol has the power to reduce the temperature of the body in certain conditions. Moderate doses which do not produce the least symptoms of intoxication, will cause a fall in temperature of several degrees. The habitual use of alcohol deadens the heat-reducing property until it becomes no longer observable. Narcotic dose of alcohol reduce the temperature several degree and this reduction remains for several hours. A the causes of this fall of temperature are not u derstood. One of them is an enlargement of blo vessels of the skin, and an increased radiation heat. Alcohol seems to be a drug of great val in therapeutics, but it must be given with gre discrimination. In a healthy man it is always

injurious drug. A habitual beer-drinker is as much an alcoholist as a habitual whiskey-drinker. It is the duty of physicians to support every effort to break up the indiscriminate use of alcohol as a beverage or medicine, and insist that it be used with therapeutical precision. These views were sustained by the members of the congress, and a general agreement was reached that all possible caution should be observed in the use of alcohol as a medicine, and its changing effects on different individuals.—*Therap. Gaz.*

DIABETES MELLITUS.—Professor Seegen distinguishes two forms of diabetes; the one light, in which sugar is found in the urine only when the patient ingests starchy food; the other graver, in which sugar is found, even when the patient completely abstains from the latter diet. The first form is met with as a rule in advanced life, while the graver variety attacks young and middle aged persons. The following table by Seegen, records the age at which diabetes presented itself in eight hundred cases:

In 5	per cent.	between	the ages of	1 and 10	years.
" 3	"	"	"	10 and 20	"
" 16	"	"	"	20 and 30	"
" 24	"	"	"	30 and 40	"
" 30	"	"	"	50 and 60	"
" 10	"	"	"	60 and 70	"

He has met the disease more frequently in men than in women, the proportion being as 7 to 3. The duration of the graver form is generally from four to five years. The mild form lasts from ten to twenty-five years. In the majority of cases (ninety per cent.) the nervous system is in an abnormal condition. The prognosis may be determined as follows: grst examine the urine, and prescribe an exclusively animal diet for two days, then examine the urine again. If on the second examination no sugar is found, the diaease is of the mild form; if, however, traces of sugar appear, the disease is more serious. Seegen has never observed an absolute cure in 800 cases; *i. e.*, when an experimental amylaceous diet will not yield sugar in the urine. In the mild form of diabetes, alkaline waters have a favorable action on the elimination of sugar, which lasts for some time after their disuse. In grave cases the alkaline waters and animal diet are of no value. Morphine and codeine have only a temporary action. The elimination of sugar according to this writer is, in
› light form, due to the hepatic cells which have
› the property of acting on starchy foods. In
grave form, sugar is eliminated, although the
ient may not have ingested amylaceous food,
ause the combustion of the hydro-carbon does
take place.—*Boston Med. and Surg. Jour*

ATER DILUTION OF THE BROMIDES IN EPIY.—Since Hughes (*Med. Standard*) first began prescribing the bromides in epilepsy, he has been in the habit of ordering that each dose be taken in a glass of water or milk. This obviates gastric irritability, promotes rapid absorption, and prevents undue concentration of the blood, a determining factor in the production of the epileptic paroxysm. Novi showed that spasm of the vessels, due to cerebral stimulation, resulted when the density of the blood became double that of the normal, a state brought about by the intra-venous injection of a ten per cent. salt solution. Hughes believes that the above physiological fact may aid in the explanation and treatment of idiopathic epilepsy and of eclampsia. The influence of warm baths, of enemata, and of copious draughts of warm water, over infantile convulsions, Hughes thinks would thus seem to find a rational explanation. He regards it probable "that the thickening of the blood, drained of the serum, has the same effect upon the motor centres of the muscles as sudden anæmia and withdrawal of arterial and arteriole pressure, such as is displayed in the convulsions of decapitated animals and in the cadaveric rigidity which appears when the blood forsakes the arterial channel for the venous." Dilution of the remedies given in epilepsy would seem to be indicated to thin the blood, and diminish vaso-motor irritability, and conseqent tendency to vascular spasm. —*The Polyclinic.*

ON THE DILATATION OF THE PUPIL IN LOCOMOTOR ATAXY.—I have several times observed a dilatation of the pupil in cases of locomotor ataxy in which the pupil did not contract to light. This dilatation only occurs, according to my observations, when the light employed in the search for the Argyll-Robertson symptom is intense, such a light as that used in the ophthalmoscope room. My impression has been that it is the intense light and heat acting upon the conjunctiva—i.e., fifth nerve—which is the cause of the dilatation of the pupil, just as is supposed to happen in stimulation of the skin of the neck by pinching, or by the faradaic brush. But the dilatation due to intense light and heat is very small compared with that which usually obtains in health on irritating the skin. In the case of locomotor ataxy in which this dilatation of the pupil has been witnessed, pinching the skin of the neck on the side on which dilatation occurred from exposure to strong light and heat only caused a slight dilatation of the pupil. The pupils contracted when the eyeballs were convergent. It would be interesting to know whether the great heat of the lamp had as much to do with the production of the phenomenon as the intense light. In the cases in which I have observed this dilatation, the pupils have not been very small.—Angel Money, M.D., in *Lancet.*

STRYCHNINE IN DELIRIUM TREMENS.—Large

doses of strychnine are being used in delirium tremens and alcoholism, with a success that renders the promoters of the method enthusiastic. (*Boston Med. and Surg. Journal.*) The originator, Luton, of Rheims, gives as high as a twelfth of a grain two or three times a day by mouth or subcutaneously. Dujardin-Beaumetz reports uniformaly good results from the practice. No toxic effects are produced, but a marked benefit ensues. The insomnia, agitation and delirium severally disappear. Sleep was in some instances induced, after all other hypnotics had failed. The "why and wherefore" of this new method of combatting alcoholic delirium is thus explained by Dr. Ramos, of Brazil: "I believe with M. Luton that in chronic alcoholism there is inertia of the excito-motor properties of the spinal cord, which enables the patient to tolerate large doses of strychnine. In these cases the strychnine has a substitutive action on the nerve centres, antagonizing the excitant action of the alcohol."

THE TREATMENT OF RICKETS should be by food rather than by drugs. Raw meat is of more value than iron, and cream or fresh milk than cod-liver oil. The diet must be carefully examined to see that it contains a due proportion of fat, proteids and salts. A sufficiently close estimate is easily made, since the composition of milk and of all foods used for children is accurately known. The amount of animal fat in a rickety child's food must equal at least one-fourth of the total sollids taken; proteids and carbohydrates about one-third, and salts about one-tenth. Such a diet will cure rickets without drugs. Iron is often a useful adjunct. The salts of lime may be added in the form of lacto-phosphate. Potent aids are sunlight, fresh air, and warm clothing.—*Lancet.*

ETIOLOGY OF PUERPERAL FEVER.—At the Medical and Chirurgical Society, of London, Dr. W. R. Smith read a paper on "The Etiology of Puerperal Fever," based on some researches carried on at the Brown Institution. Blood was obtained from the heart of a patient who had died from puerperal fever, and cultivations made on gelatine in the usual way. Blood was also obtained from the finger of a woman suffering from puerperal fever, and similar cultivation-experiments made. As the result of numerous observations, Dr. Smith had found that a micro-organism occurred in the blood of persons affected with puerperal septicæmia in considerable numbers in the form of streptococci. Culturally there were marked differences between it and other streptococci. Its action on mice was distinct and definite, and it could be distinctly distinguished from the erysipelas streptococcus of Fehleisen, and from the streptococcus pyogenes Rosenbach. An animated discussion followed the reading of the paper.—Correspondent, *Med. Rec.*

ANÆSTHETICS IN LABOR.—The ethical question, How far is it pusillanimous and even irreligious to profit by the annihilation of pain which anæsthesia affords under surgical operation, and in parturition? has recently undergone discussion anew in some of the French papers. The discussion is antiquated and out of date in this country, and many of the stories told would hardly bear repetition in this serious country. Sir James Simpson long ago disposed of the argument now revivified, which charges the woman who accepts anæsthesia in childbirth with evading the biblical injunction of pain. An indignant French-woman has revived an old argument with some flippancy, but not without a reckless wit. "You quote," she says, "some verses of the Bible against us; but let me remind you that the only one of your sex who took his part in the act of giving birth profited by anæsthesia; for when Adam gave up a rib toward the creation of Eve, he was first thrown into the deep sleep of insensibility."—*Br. Med. Jour.*

DANGERS OF BLISTERING IN CARDIAC DISEASE.—Professor Jaccoud, of Paris, calls the special attention of practitioners to the contra-indications to the employment of flying blisters in certain cases of disease of the heart. The important point, according to this distinguished authority, is to ascertain the state of the kidneys in these subjects. In case there be discovered in the urine even the smallest trace of albumen, the use of blisters to the præcordium ought to be rigorously proscribed. Neglect of this rule has led to the unwitting aggravation of the patient in many instances. Sometimes ignorance has been the cause, sometimes imperfect testing, at other times culpable temerity—which has made light of the presence of albumen while a blister was being prescribed. It is easy to substitute iodine paint to the præcordium if cantharides be contra-indicated.—*The Practitioner.*

A VERY fine exhibit was made at the American Institute by the Jerome Kidder Manufacturing Company, 820 Broadway, New York, makers of Dr. Kidder's electro-medical apparatus. The company may well take pride in their exceptionally fine line of instruments, medical batteries, etc. The company have received the highest awards from the Institute since 1872, and so far from falling off in their productions, manifest a steady onward and upward tendency. They show a full line of galvanic batteries, galvano-caustic batteries, many styles of faradiac batteries for family and physicians' use, tip batteries, surgical instruments, cauteries and special appliances for and endless variety of medical and surgical operations.—*Electrical World.*

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ABORTIONISTS.

Although little is said concerning the prevalence of abortionists in cities and towns, not to say villages, yet their presence cannot unfortunately be denied. It is pretty generally known, not only to the profession, but to the laity, that these criminals practise their nefarious trade among us with comparative impunity. Occasionally the subsequent dangerous illness or death of these unnatural mothers, exposes the abortionist to the perils of the law, and he or she is convicted, and suffers the legal penalty of the crime. But we are convinced that exposure and conviction are very rare exceptions, and that the great majority escape any punishment, and continue to extort large incomes from those who have fallen from virtue, and from more inhuman married women, who wish to be relieved of the care and trouble of raising their offspring. We are of opinion that this sad condition of affairs could not obtain so largely, were the community not generally tolerant, and the public apathetic. Indeed, we fear that even members of the pro. ession ignore their duties in this respect, and ven neglect to assist in bringing upon abortionts the legal consequences of their crime, somenes becoming *particeps criminis*, by concealing eir knowledge from the authorities, in order to oid an exposure of the fair sinner, and prevent family from suffering from the scandal necesly consequent. Indeed, it is possible that the powers that be, do not always put forth as much effort as they might, to secure the suppression of abortionists, on account of social consequences to those entirely innocent. Hence the abortionist often goes unwhipped of justice.

That this indifference, this apathy of the community in general is largely responsible for the existence of abortionists, and the demand for their crime cannot be questioned. Of the immorality and deplorable results consequent upon this growing murder of the innocents, it may not be our province to speak; yet, as citizens, we should possess an interest in suppressing so heinous a crime, and, as medical men, we are in a position to know more of its prevalence and demoralizing tendencies than others. Hence the question whether professional secrecy should be extended to a crime of so vicious a character. The law justly considers it a capital offence, with a penalty attached little less than that of murder or homicide. Therefore, the medical man can hardly be guiltless who assists in defeating the ends of justice by suppressing his knowledge of the crime and criminals.

But we know it to be injurious and often dangerous to ourselves. What physician, in practice for any length of time, has not had many applications, often accompanied by a considerable bribe, to relieve the victim of the seducer from the social disgrace attached to her sin, or the selfish and degraded married female from the care and trouble naturally devolving on her? It is to the credit of the profession that so few have fallen victims to so alluring a temptation, especially the younger members, to whom these applications are more frequently made when patients and fees are often extremely rare. But if he politely but distinctly refuses to become an abortionist, either for sympathy or lucre, he often secures the enmity of the applicant and her friends, and is sometimes charged with the very crime he refused to commit, and, it may be, put to the annoyance and expense of defending a criminal lawsuit where the difficulties of successfully defending himself are obviously great; and, though he succeeds, he is often injured financially and socially, and his practice among the community in that vicinity largely destroyed. This is no imaginary picture. Numerous instances could be mentioned where false charges of this nature have been made, possibly to screen the

actual criminals, or to gratify the resentment of those on whom exposure has fallen through the abortionist's mismanagement and the subsequent illness or death of his victim, on whom the medical man had declined to operate. Indeed, more than one instance could be quoted where innocent physicians have committed suicide from the mental worry and distress caused by false charges of this character. Therefore, in our interests and for the credit of the profession, if upon no higher ground, we should exert every effort to bring these odious excrescences upon our body professional to justice. The difficulties of obtaining sufficient evidence are great, but not insuperable. Were we to adopt the course of informing some competent executor of the law, of each criminal application of this nature made to us, to be acted on or otherwise as circumstances might demand, such applications would soon cease and the temptation and danger incurred to medical men obviated. The professional abortionist would soon find more difficulty in evading the laws made and provided in our penal statutes. A much healthier public opinion would obtain, and the detestable practice would be regarded with greater abhorrence. Hence the difficulty of obtaining sufficient evidence in these cases would be largely diminished, and not only would the crime be lessened, but also, in many instances, demand for abortion might be obviated on account of stronger motives inspired to resist the wiles of the libertine. That this sin of the age prevails so largely among civilized nations is a disgrace to the boasted cultivation and morality of the present century, and one whose demoralizing and pernicious influences can hardly be computed.

INFANTILE CONVULSIONS.

In a paper on the above subject by Dr. J. N, Love, of St. Louis, he emphasizes the following points *(Weekly Med. Rev.)*:

1. We must not lose sight of the fact that a convulsion is only a symptom and not a disease. We must promptly determine the cause and then intelligently and energetically eliminate it. 2. We can probably classify the majority of cases of infantile convulsions as being caused by ill-fed nerve centres (rachitics and victims of tuberculosis), reflex irritations and cerebro-spinal engorgements and congestions dependent upon the high temperatures incident to the poisons of malaria, the infectious diseases and narcotics. 3. As we can make a triple classification in the etiology, it follows that we should have a similar division in the matter of treatment, and succinctly stated we may designate the latter as (*a*) nutritive and constructive, (*b*) a removal of all irritation from the sympathetic system, (*c*) antiphlogistic eliminature, cooling and sedative. 4. While calming the fears of the agonized parents, whose child is taken with a spasm, by assurances that an infant rarely dies in this manner, and that causes, the most insignificant sometimes, occasion the disturbance, we should not fail to impress them with the fact that it is a serious matter, and that the best possible way to treat the convulsive diathesis is a perfect hygienic regime, prevention by good food, proper clothing, fresh air and sunshine, plenty of sleep and avoidance of all excitement. 5. On discovering a child in an eclamptic paroxysm, no one article is more essential to a proper examination than a well tested thermometer (it being practically the doctor's sixth sense which enables him to go far toward making a diagnosis), and the only proper place for locating it, in ascertaining the degree of fever, is the rectum, leaving it *in situ* not less than three minutes. 6. For the prompt quelling of a spasm, chloroform by inhalation is a most valuable remedy, but it should be used carefully and not too early, as it may serve as an agent to mask the true condition of the patient, the hiding of the danger signal kindly thrown out by Dame Nature. 7. In the cooling bath we have a prompt and potent means for quelling the riotous condition of the cerebro-spinal system, not the sudden ice-cold, bath as that borders on the brutal, but the water in the beginning, about the temperature of the patient, and gradually reduced to 70° or 60° Fahrenheit, and possibly lower, if the indications call for it. 8. In acetanilid I am sure we have a most valuable remedy for the relief and prevention of convulsions. Clinical experience for one year justifies the conclusion. The action of the drug is rapid, usually beginning to manifest itself within an hour, and not infrequently within twenty minutes, its full effect reached in four hours. Pulse and respiration are slowed, arterial tension rises, diuresis and diaphoresis occur, pain is relieved and sleep usually ensues. No very great amount of depressior

follows, if given carefully, but an exanthematous rash now and then accompanies its administration.

In confirmation of my own experience of its value in the convulsive diathesis, I note the fact that Dr. H. N. Mayer, in the *London Med. Rec.*, of Aug. 20, 1888, reports favorably on its use in epilepsy, five grain doses three times daily.

COLOR BLINDNESS.

"Mocking the air with colors idly spread,"

May be said to be the unfortunate condition of the color blind. In the year 1777, the first case of color blindness, that of the shoemaker, Harris, of Maryport, in Cumberland, was described by a Mr. Huddart. A few years later, Dalton described his own sensations. Three-quarters of a century elapsed before another Englishman attempted a scientific investigation of the subject; this was Professor Wilson, of Edinburgh. But it is to Professor Holungun, of Upsala, Sweden, that we are indebted for producing a practical system of investigation. His work was published in 1871, nearly a hundred years after the publication of shoemaker Harris' case.

The invention of steam engines and railroads gave color blindness an importance that it otherwise might not have had, inasmuch as the necessity for signalling caused the use of colored lights and flags. Then it was found that there were those who could not distinguish the color of them. Experience has proved that color blindness is incurable, and the greatest good that can accrue to a color blind is to know that his color sense is defective early in life, and by accustoming the eye to the sensations of color, and the ear to the names, the power of distinguishing color tone is increased, though color itself cannot be appreciated as by the normal eyed.

This being the case, the importance of a careful elimination of the color blind from among railway employees can hardly be over-estimated. It will e ly be understood that mistaking the danger signal f the safety signal may involve great loss of life a money. That such an event has occurred is in- c testible. In most countries, the examination c railway employees is controlled by law. In t country, the companies use their own discre- t in the matter. The examinations are con- d ed by the superintendents of divisions. In our opinion, the examinations should be controlled by experts who have made the color sense and color blindness a special study. If necessary, legislation should be obtained to accomplish this object.

Public attention has recently been called to this subject by Professor Ryerson, in a paper read at the Canadian Institute.

NOTES AND OBSERVATIONS

FROM NEW YORK HOSPITALS AND SOCIETIES.

For the relief of those obstinate cases of chorea in which arsenic has been tried and failed, Prof. Janeway strongly advises the use of Hyoscyamine in doses of $\frac{1}{100}$ grain three times a day. In many cases he has seen almost miraculous results, the choreic movements being controlled entirely.

In cases of anteflexion, Prof. Thomas no longer recommends the use of pessaries; and New York Gynecologists, in accordance with modern uterine pathology, have almost discarded the use of pessaries. His treatment is as follows: after thorough douching of the vagina with bichloride, he introduces Ehlinger's dilators and thoroughly opens the cervical canal, great care being taken to dilate the internal os. Then the uterine cavity is douched, the anteflexion corrected by means of a sound, a perforated glass cervical stem introduced and left in position. It is not necessary to remove it during menstruation, but on any suspicion of pregnancy it should at once be removed. It will be remembered by all who have read his work on Diseases of Women, that he relates that this procedure is frequently followed by peritonitis and is to be regarded as dangerous. He explains this by stating that it is now nearly ten years since he has revised his book, and it was written before the days of antiseptic gynecology, and by strict antiseptics it is found that this plan is unattended with danger. Prof. Thomas states that he now has numerous patients, some of whom have travelled all through Europe wearing these glass stems, and none have complained of any ill symptoms, and the relief obtained, in some cases, all that could be desired.

The lack of advantages in New York for the proper study of gross pathology has long been felt; heretofore, the drawback has been a proper place

for the performance of autopsies, and the concentration of them. This is to be obviated by the erection of a suitable post-mortem building adjoining the city morgue at Bellevue Hospital, where, it is understood, every convenience will be supplied and courses given similar to those in the European medical centres. The advantages for microscopic work in New York are unsurpassed anywhere, all of the medical colleges have magnificent laboratories, so that this addition will be a welcome boon to student pathologists.

Creolin is the latest antiseptic and it has been given an extensive trial. The ordinary strength used in surgical operations is 1 per cent.; it makes a milky looking emulsion. It is used in all cases where bichloride or carbolic are applicable, and is supposed to have the property of checking capillary hemorrhage, besides being an excellent antiseptic and deodorant. As a deodorant it has given good results in fetid discharges as in carcinoma uteri, etc. As a general antiseptic it does not appear destined to become very popular, but by experiment it is found that a few drops of a three per cent. solution completely destroyed the cholera bacillus, so that it may prove of use in the treatment of Asiatic cholera. It has also been tried in the diarrhœa of phthisis, dose five ounces three times a day, with very favorable results.

INCREASED MORTALITY FROM CANCER.—In the Morton lectures delivered by Sir Spencer Wells, he said: "Notwithstanding the great advance in sanitary science and the prolongation of the average length of human life—in spite of the shortening of the duration and the lowering of the mortality of some diseases, the prevention (almost the stamping out) of others—cancerous diseases, so far from being less prevalent or less fatal, are increasing among us. The increase in the number of deaths from cancer is now, and has been for many years past, greater than the proportional increase of population." And he proved conclusively that this increase is common not only to England and Wales, and in Scotland to nearly the same extent, but also in Ireland, though in smaller proportion. The correspondence between the Collective Investigation Committee of the British Medical Association and the Registrar-General will not be forgotten, and its importance was fully acknowledged by Sir Spencer Wells. The facts that the number of deaths from cancer in England had increased from 7,245 in 1861 to 17,113 in 1887, and that the proportion of deaths from cancer to one million persons living had increased from 360 in 1861 to 606 in 1887 in England; in Ireland from 350 in 1877 to 430 in 1887; and in Scotland from 404 in 1861-65 to 540 in 1881-85, are surely of extreme importance. They will probably surprise most of our readers. They have never before been so clearly put before us as in the second Morton lecture.

INEBRIETY.—In a paper recently read on this subject, before the Medical Jurisprudence Society, Philadelphia, Dr. Parrish summarises *(Polyclinic)* as follows:

1. Alcoholic inebriety is a disease which chiefly affects the nervous system, and may be transmitted from one generation to another, or it may be created by long continued indulgence, and render its victims as much slaves to its power as if inherited.

2 In either case the symptoms are the same, and the person is debauched at intervals of varying duration, being controlled by an impulse which is beyond the reach of human will.

3. When committing a criminal act, is is usually done in a state of unconsciousness and irresponsibility.

4. If convicted of crime, he should be isolated from the community in a hospital or asylum provided by the State.

5. The dangerous element of the disease is in the fact that when alcohol enters into the human body in excess, it assails the inhibitory power, controls the will, and enslaves its victim beyond his power of choice.

ACTION OF ALCOHOL ON THE HEART.—Dr. Richardson writes *(Jour. of Inebriety)* on the above subject as follows:

"Although the primary effect of alcohol is on the nervous system, the first organ to bear witness to that effect is the heart. The pulse requires three days to regain its normal condition after complete intoxication. In the inebriate the heart is never normal in its action. At first it is made tense and full. In continued inebriety this extends to permanent enlargement, dilatation, with stretching of

the valves, and distension of the whole arterial system. Then comes modification of structure. The heart is large, dilated, the arteries rigid, the veins bulging. In the major form of inebriety two to six years are necessary to restore the circulatory organs to something of their normal condition.

THE TREATMENT OF DIPHTHERIA WITH INSUFFLATIONS OF SUGAR.—C. Lorey *(Deutsch. med. Wochenschr., Am. Jour. of Med. Science)* highly recommends the treatment of diphtheria by the insufflation of very finely powdered sugar upon the tonsils, pharynx, posterior nares, the entrance to the larynx, and, after tracheotomy, through the canula. As a result of careful observation on eighty cases of diphtheria of all forms, and at all ages, he concludes that under this treatment the duration and extent of the diphtheritic deposit, and the danger of general infection can be lessened. The odor of decomposition also disappears, the mucous membrane of the tonsils and pharynx becomes more natural in appearance, and is coated with an abundant mucous secretion, and the false membrane softens and becomes detached. In many cases in which the larynx was involved, the insufflation loosened the cough and the threatening symptoms gradually ceased. The favorable action of sugar on unhealthy granulations has long been recognized. In the pharynx, the fine particles of sugar penetrate into the mucous membrane and cause a flow of its secretion toward the surface, loosening the membrane, and perhaps washing away the micro-organisms. General treatment is, of course, to be employed also, and for this purpose the author prefers apomorphia, and later, an easily digested iron preparation.

SALICYLIC ACID AND ITS SALTS.—W. A. Cauldwell, M. D., Chicago, in discussing the rational selection of the salts of salicylic acid *(Gaillard's Med. Jour.)*, says they are insoluble in the acid gastric juice, but in the duodenum they are split into carbolic and salicylic acids. Some of its ious uses are: 1. To remove certain morbid terials from the system. 2. To act as an eptic in the intestinal canal. 3. To act as an tiseptic in cystitis and pyelitis. 4. To act as an tiseptic in the treatment of wounds, ulcers, etc. licylate of bismuth is of great service, given half drachm doses every two hours in inflammatory affections of the gastro-intestinal tract. It is astringent and antiseptic, arresting fermentation, and is good in diarrhœa of phthisis and typhoid, cholera morbus, dysentery, and dyspepsia with acid eructations. Salicylate of magnesium is useful in enteric fever, diminishing the swelling of the abdomen, and removing the septic material from the intestinal canal, as it is not astringent.

PUERPERAL ECLAMPSIA.—Dr. Auvord's work on puerperal eclampsia *(Bull. d'Acad. de Méd.)* has the following statement as to the result of various methods of treatment adopted in this disease:

I. *Mortality of Mothers.*

1.	Purgatives	43 per cent.
2.	Forceps	42 "
3.	Bleeding	35 "
4.	Chloroform and chloral	34 "
5.	Version and delivery	38 "
6.	Preventive milk diet	28 "

II. *Mortality of Infants.*

1.	Version and delivery	57 per cent.
2.	Bleeding	53 "
3.	Forceps	40 "
4.	Purgatives	37 "
5.	Chloroform and chloral	27 "
6.	Preventive milk diet	21 "

BITARTRATE OF POTASH IN PUERPERAL ECLAMPSIA AND BRIGHT'S DISEASE.—Dr. Edward Anderson writing to the *Maryland Med. Jour.* says of a former letter to that journal, recommending pot. bitart. in the above affections: "I am glad to see what I therein stated endorsed by the Gynecological and Obsterical Society of Baltimore, at its meeting Dec. 11, 1888. The bitartrate will not only prevent convulsions from occurring during pregnancy but will also prevent their occurrence in Bright's disease and in albuminuria following scarlet fever. I treated a farmer, the subject of Bright's disease, for seven years, and kept him tolerably comfortable up to within three months of his death by administering the bitartrate of potash to him whenever his urine became loaded with albumen; he performed hard labor all the time."

SPECIFIC GONORRHŒA IN FEMALES.—Gonorrhœa in the female can be speedily cured, when the

disease is confined to the vagina, by vigorous use of hot-water injections and warm hip baths in the acute stage, and injection of bichloride solution, 1 to 1,000, after the acute stage has subsided. The corrosive sublimate solution should never be used in the acute stage of specific gonorrhœa, but after the acute inflammation has subsided it should be used copiously every few hours till cure is obtained. Perfect quiet is necessary in the acute stage, and is also beneficial in the chronic. Tampons of hydronaphthol and glycerine may also be employed with benefit.

OINTMENT FOR FURUNCLES. — *L'Union Méd.* says, that an ointment composed of 1½ grs. red precipitate to ½ an ounce of vaseline, is an excellent application for furuncles. If a stye is to be treated, apply the ointment over the affected part and rub gently. In some persons with a delicate skin, the red precipitate may require to be reduced to ¾ or ½ a grain. A single application is said to arrest small furuncles. When they are large, several applications made the same day will effect a cure.

THE BEST TWENTY-FIVE DRUGS.—The following list says the *Med. Rec.* has been suggested as representing the "soul of the pharmacopœia": 1, opium; 2, mercury; 3, iodides; 4, quinine; 5, chloroform; 6, ether; 7, sulphate of magnesia; 8, salicylic acid; 9, aloes; 10 alcohol; 11, bromides; 12, iron; 13, chloral; 14, castor oil; 15, digitalis; 16, arsenic; 17, colchicum; 18, ipecac.; 19, aconite; 20, strychnia; 21, cocaine; 22, ergot; 23, bicarbonate of potash; 24, mineral acids; 25, nitrites.

NIGHT SWEATS.—Few practitioners, says *Technics*, appreciate the exceedingly great value of agaricin as a remedy in night sweats, especially those of phthisis. The most profuse sweat is checked almost like magic, with a single dose. It operates by diminishing thirst and increasing the secretion of urine. The dose may be pushed to the extent of one grain in the course of twenty-four hours. The single dose for an adult is from one-eighth to one-fourth of a grain.

NEW LOCAL ANÆSTHETIC.—A new local anæsthetic, HAYAP, was lately presented at a meeting of the Berlin Medical Society. It was brought from Africa in a reddish mass. An aqueous solution caused in fifteen minutes after its instillation into the eye, complete anæsthesia, which lasted from ten to twenty-four hours.

ANTIFEBRIN.—Dr. Theodore Cash, F.R.S., Professor of Therapeutics in Aberdeen University, says, antifebrin is "an antipyretic of the first order," and to be preferred to antipyrin on the following grounds: 1. The smaller dose in which it is operative. 2. The steadier and more continued action. 3. The comparative freedom from danger of causing collapse. 4. Its cheapness, being purchasable in the open market. Its drawbacks are its insolubility and its tendency, to produce in time anæmia, which, however, is very amenable to treatment.

PERNICIOUS ANÆMIA.—Dr. Henry Walds recommends (*Br. Med. Jour.*) B-napthol in three grain doses every four hours in pernicious anæmia. Dr. William Hunter, he says, concluded after a long and careful investigation that the disease is extensive blood destruction, caused by the action of certain poisonous agents, probably of a cadaveric nature absorbed from the intestines.

INOCULATION OF CANCER.—There is reason to believe that recurrence of cancer may be due to accidental inoculation. Prof. Hahn lately engrafted three portions of skin, infiltrated by cancer upon the opposite breast of a patient suffering from cancer. Shortly afterwards when she died, examination of the breast upon which the grafting had been done, showed cancerous elements present.

CHOREA.—The following is an excellent formula for chorea:

R.—Ac. Arseniosi, ... gr. ij.
Strychniæ sulph, . . . gr. iv.
Fer. et. ammon. cit., . . gr. xx.
M.—Et. divide in pil. xx.

S.—One three times a day, after meals.

THE HOG AHEAD.—The *Med. Rec.* says, it is stated that the United States Government has paid more money for the investigation of diseases of the hog, than for all the diseases affecting the human race.

Boils.—Those persons troubled with successive crops of boils, should resort to 6 to 10 drops of Fowler's solution of arsenic three times daily. Turpentine in same doses is often an efficient remedy. Warts are said to be removed by the same doses of arsenic solution in a short time.

The following prescription is recommended in anæmic and poorly nourished patients suffering from rheumatism :

℞.—Sodii salicylatis, ... ʒ iv.
Glycerini, ... ʒ ij.
Ol. gaultheriæ, ... ♏ xx.
Tr. ferri chloridi, ... ʒ iv.
Acidi citrici, ... gr. x.
Liq. ammonii citratis, ad., . ʒ iv.—M.
Sig.—ʒj several times a day.

The first triennial prize of two hundred and fifty dollars under the deed of trust of Mrs. W. F. Jenks, has been awarded by the Prize Committee of the College of Physicians of Philadelphia, to John Strahan, M.D., M.Ch., M.A.O. (Royal University, Ireland,) 247 North Queen St., Belfast, Ireland, for the best essay on "The Diagnosis and Treatment of Extra-Uterine Pregnancy." The writers of the unsuccessful essays can have them returned to any address they may name, by sending it and the motto which distinguished the essay, to Ellwood Wilson, M. D., College of Physicians, Philadelphia.

Dietetic Notes.—We would call the attention of our readers to the advertisement of the Lambert Pharmaceutical Co., of St. Louis, to be found on page 5. This Company has had prepared Dietetic Notes, suggesting the articles of food to be allowed and prohibited in several diseases in which their Lithiated Hydrangea has proven of special service. A neatly bound book of these dietetic notes, each note perforated for the convenience of physicians in detaching and distributing their patients, will be sent free of cost; together with an illustrated treatise upon Catarrh and other monographs of more than ordinary interest bearing upon the value of Listerine in the internal and external antiseptic treatment of disease.

Ministerial Risk.—"I'm very glad to have been of any comfort to your poor husband, my good woman. But what made you send for me, instead of your own minister?" "Well, sir, it's 'typhus' my poor husband's got, and we dinna think it just reet for our own minister to run the risk!"—*Punch.*

Hartford, says *Puck* is literary, but not geographical. When the bronze image of H. Wells found its present resting place in Bushwell Park, this inscription was chiselled into its base: "Horace Wells, who discovered Anæsthesia." And a pretty society girl, happening to pass that way, read the inscription and wrestled with the problem therein suggested, until she reached home; and then with brow knitted with perplexity, she said to her sister: "Millie, where is Anæsthesia?" No! Hartford is not geographical.

Says the *Med. Rec.*: "There is not in France a medical school which has a professor of gynæcology, nor is there in the whole country a special hospital for the treatment of the diseases of women."

Prof. Lewis A. Stimson has been appointed to the Chair of Surgery in the University of New York, in place of Prof. J. W. Wright, resigned.

The University of Zurich has decided not to allow women attend at lectures.

Medical Council Examinations.—We beg to call attention to the advertisement in another page, of the date of the Medical Examinations.

W. E. Sprague (Trin. 1884), has lately passed the second examination in Anatomy and Physiology, R.C.P.S., London.

Books and Pamphlets.

Wood's Medical and Surgical Monographs—Consisting of original treatise and complete reproductions in English of Books and Monographs selected from the latest literature of foreign countries, with illustrations, etc. Published monthly at $10 per year. Single copies $1.00. New York: William Wood & Co. 56 & 58 Lafayette Place. Toronto: Vannevar & Co.

This series of Monographs is intended to furnish the busy practitioner with full and complete essays upon the prominent topics of the times in

the medical world. While "Abstracts" and "Progress of Medical Science" in the weekly periodicals serve to direct the attention of the profession to what is being done in the way of discoveries and in practice, these Monographs will inform him fully regarding the details of the experiments and methods which have led up to the successes attained—details essential for every one desirous of following the original thinkers in the same line of investigation or practice. Under this plan, practitioners who read only English may become acquainted with the most recent and advanced writings of prominent authors of foreign countries; a matter of great importance. The January number contains: The Pedigree of Disease, by Jonathan Hutchinson, F.R.S.; Common Diseases of the Skin, by Robert M. Simon, M.D., and Varieties and Treatment of Bronchitis, by Dr. Ferrand. The February number has: Gonorrhœal Infection in Women, by W. Jap. Sinclair, M.A., M.D.; On Giddiness, by Thomas Grainger Stewart, M.D., and Albuminuria in Bright's Disease, by Dr. Pierre Jeantin, Paris. The names of these authors speak for themselves. We can truly say that the articles are excellent. The cheapness and attrac tiveness of this new venture must ensure a great success to the publishers. We can heartily recommend our readers to invest in these Monographs, feeling sure that they will get the worth, and more than the worth, of their money, even in these days of comparatively cheap medical literature.

HAND-BOOK OF THE DIAGNOSIS AND TREATMENT OF SKIN DISEASES, by Arthur Van Harlingen, M.D., Professor of Diseases of the Skin in the Philadelphia Polyclinic and College for Graduates in Medicine, etc. Second Edition, revised and enlarged; eight full-page plates and other illustrations. Philadelphia: P. Blakiston, Son & Co.; Toronto: Carveth & Co. Cloth, pp. 405. 1889.

This new edition of an already popular book is a considerable improvement upon the last. Some of the articles have been entirely re-written, and others have been added to. A few new articles, chiefly upon some of the rarer affections, have been introduced. The illustrations are a new feature, and they will, we think, aid materially in the diagnosis of skin affections. One excellent feature in the work is the explicit directions for treatment, supplemented by a large number of formulæ, rendering it a genuine aid to the general practitioner. The size is sufficient to make it fairly comprehensive without being bulky. We can say that it is a good and useful book for the general practitioner, who has not time to enter into the study of skin diseases with the same degree of minuteness that the specialist does.

THE FUNCTIONS AND DISORDERS OF THE REPRODUCTIVE ORGANS of Childhood, Youth, Adult Life and Advanced Age; considered in their physiological, social and moral relations, by William Acton, M. R. C. S., late Surgeon to the Islington Dispensary, etc., etc. Seventh Edition. Philadelphia: P. Blakiston, Son & Co., 1888; Toronto: Vannevar & Co. pp. 260, cloth.

An interesting and thoughtful book, containing much that will be of service to practitioners dealing with sexual disorders. His chapters on Impotence and Spermatorrhœa are exceedingly good. We commend the work as a good one to those interested in the questions dealt with.

TEXT BOOK OF MEDICAL JURISPRUDENCE AND TOXICOLOGY, by John J. Reese, M.D., Prof. of Medical Jurisprudence and Toxicology in the University of Pennsylvania, etc. Second edition, revised and enlarged. Philadelphia: P. Blakiston, Son & Co. Price $3.

This is a concise and readable work, setting forth in an able manner the legal points in evidence and practice required by a medical man, and also the latest tests and symptoms in toxicological cases. We can highly commend the manner in which the subject is dealt with; it is practical and clear for students and practitioners alike—a most valuable treatise.

Messrs. J. B. Lippincott Company announce to the profession the publication of a "Cyclopædia of the Diseases of Children," medical and surgical, by American, British, and Canadian authors, edited by John M. Keating, M.D., in four imperial octavo volumes, to be sold by subscription only. The first volume will be issued early in April, and the subsequent volumes at short intervals.

Births, Marriages and Deaths.

On the 18th February, at 642 Bathurst Street, Toronto, the wife of Dr. T. W. Simpson, of a son.

At 92 Merrick street, Hamilton, Feb. 16, the wife of Douglas G. Storms, M.D., of a son

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Original Communications.

ON THE INTERCOMMUNICABILITY OF TUBERCULOSIS BETWEEN THE DOMESTIC ANIMALS AND MAN.*

BY EDWARD PLAYTER, M.D., EDITOR CANADA HEALTH JOURNAL.

Of all the destroyers of human life, tuberculosis stands first. Evidently not less than at least 10,000 lives, and possibly 15,000, are destroyed by it in Canada alone every year. From one-sixth to one-tenth of all deaths, almost everywhere, are caused by tuberculosis; chiefly by that form of it known as pulmonary consumption. The investigation of the cause and the source, then, of this most destructive agent, is a subject of the very first importance, not only to this locality, but to the country at large.

As it is not my object to enter into the unhygienic conditions which give immediate rise to this disease—to suitable soil for its development, or, rather, which so depress the vitality as to enable the bacilli or their spores to take root in the human organism, develop, multiply, and destroy life,—I will now at once endeavor to lay before you some of the evidence which has been recorded to show that the disease may be, and probably frequently is, communicated to the human organism from domestic animals, and more especially from cows.

About seven years ago at this present time, Mr. Asst.-Surg. Shaw, of the U. S. Bureau of Animal Industry, at Washington, said, in the *U. S. Health Bulletin*:—"To-day, after ten years of experimental observations by Villeman, Viscar, Klebs, Zurn, Klinger, Leisering, Chauveau, Bagg, Semmer, Gerlach, Harms, Biffi, Virgad, Gerlach, Buhl, Tilbury, Fox, Burden-Sanderson, and a host of others, it has been definitely established: 1st, that the tuberculosis can be transmitted from animal to animal, from man to animals, and presumably from animals to man, by inoculation, or by the accidental contact of tuberculous matter with a raw or abraded surface; 2nd, that the raw tuberculous matter taken from man and animals and eaten by other animals, may determine tuberculosis in the latter; 3rd, that even the flesh of tuberculous animals will sometimes produce tuberculosis in animals that consume it, though with less certainty than if the tubercle itself were taken; 4th, that the milk of tuberculous animals will at times produce tuberculosis in susceptible subjects, and, above all, where the morbid deposit has taken place in the udder; 5th, that cooking of the tuberculous matter gives no guarantee of protection, as flesh is a poor conductor of heat, and tubercle that had been boiled from a quarter to half an hour, has readily infected a number of animals that partook of it; 6th, that tubercle matter mixed with water and thrown into the air from an atomizer, causes with great regularity the development of tubercles in the lungs of animals respiring such air.

Within the last seven years the subject has received a great deal of attention, and a great deal of scientific investigation has been the result.

The bacillary origin of tuberculosis, and the transmissibility of the disease from one individual of the human race to another, are points now universally admitted, and not doubted by any one, I believe, whom we can regard as an authority. The disease is the most common of all human diseases, except the ordinary infectious diseases of childhood, and the sources or vehicles of it must be proportionately common.

Dr. E. F. Brush, who is I believe connected with the Bureau of Animal Industry at Washington, and who, as he states, has long been compelled to devote his attention to the subject of diseases affecting dairy stock, in a lengthy article in the *N. Y. Medical Journal*, in March of last year, on the question we are now considering, declared it as his "candid opinion" that tuberculosis "is all derived from the bovine race." The human race is almost everywhere associated with the cow. As Dr. Brush words it, "We are veritable parasites on this animal. We milk her as long as she will

* Read before the Meeting of the Ottawa Medico-Chirurgical Society, March 8th, 1889.

give milk, and we drink it; then we kill her, eat her flesh, blood, and most of the viscera; we skin her, and clothe ourselves with her skin; we comb our hair with her horns, and fertilize our fields with her dung, while her calf furnishes us with vaccine virus for the prevention of small-pox." Now the cow has tuberculosis and we have tuberculosis. If we regard her as a possible common centre of the infection, we have a reasonable and full explanation of the commonness of consumption. Where this animal does not exist, pulmonary consumption, it appears, is unknown. The inhabitants of the steppes of Russia, who have no cows, have domesticated the horse, using its milk, meat and skin, and it is said a case of pulmonary tuberculosis has never been known to exist among them. The Esquimaux have no cows, neither have they pulmonary phthisis; and it appears to be a fact, that, where the dairy cow is unknown, pulmonary consumption does not prevail. Evidence that a certain amount of relation exists between the death-rate of man and animals respectively from consumption, and that this relation is materially affected by the use of tuberculous flesh for human food, is afforded in a chart issued by the authorities of the Grand Duchy of Baden, in the year 1881. The chart applied to 52 towns, and showed that, where tuberculosis was prevalent among cattle, it was proportionately prevalent amongst human beings, and was particularly prevalent in towns in which the number of low-class butchers was greatest. One remarkable exemption to this was, however, found in the town of Wertheim; but it was significantly pointed out, that from this town large quantities of sausages, made from flesh of inferior quality, were annually exported. Many observations of a like nature have been made in the United States; that is, that where tuberculosis is prevalent among cattle, it is proportionately prevalent amongst the human population.

At the Paris Congress on tuberculosis, in July last, Dr. Robinson, of Constantinople, in a communication on Consumption in Asia Minor, stated that, notwithstanding the fact that the inhabitants of this country lived much in the open air, the disease was very prevalent, and ten per cent. of his patients suffered from it. The natives recognized its contagiousness, and always destroyed all articles, etc., used by those suffering from it. The frequency of the disease there, Dr. Robinson said, there could be no doubt, was owing to the free consumption of milk and of nearly raw flesh by the natives.

On the other hand, the Hebrews are exceptionally free from tuberculosis, as we all know, and they exercise the greatest care in the inspection of the meat they consume. The lungs of all the animals destined for their food are examined, and in all cases where they cannot be fully inflated, or where there are adhesions of the pleura, the animals are rejected.

What are the conclusions we are almost forced to draw from these facts?

I need hardly state here that tuberculosis in the bovine race, once known as the "pearl disease," is now universally regarded as being identical with the tubercular disease in man. Not only are the bacilli in the two cases undistinguishable under the microscope, but their growth in various culture media, and their other biological characteristics are identical. The latest scientific evidence I have observed on this point is this: Dr. Woodward and Prof. McFadyean, last year, examined 600 cows in the Edinburgh dairies. Among other results of their investigations, Dr. Woodward states that he found as great differences in size between the bacilli under the same cover-glass, from sputum of a tuberculous patient, as he had found between bacilli taken from a cow and those from a human subject; and he concluded that any differences there might be between the size, mode of growth, or position in the tissues of the human and bovine tubercle bacilli, was not sufficient to constitute a specific difference.

From our present degree of knowledge of comparative physiology, should we not naturally conclude that any parasite finding a favorable soil for its development in the cow or other domestic animal, would find the soil of the human organism about equally favorable; and vice versa? The bacilli all appear to be very tenacious of life, and a difference of two or three degrees in the temperature of the different organic fluids, they would doubtless readily reconcile themselves to, and likewise to any other slight physiological or chemical differences existing between the internal structure or condition of the human body and of these lower animals.

There is a large amount of the most conclusive evidence that the disease is communicable from

man to the domestic animals. Besides a great many instances of observation, in which it was plain that poultry had contracted well-marked tuberculosis from eating the sputa from the human lungs, the bacillus from human sputa has been, time and again, cultivated and inoculated into various animals, with the result of giving rise in them to unmistakable tubercular lesions. Bollinger, one of the first German authorities, has inoculated tuberculous matter obtained from man into the dog, and produced typical miliary tuberculosis of the pleura, lungs, liver and spleen; and a great many experiments of a like character are upon record. But I will not dwell upon this settled point.

In the last number (March 2nd, ult.) of that conservative and cautious organ, the *N. Y. Med. Jour.*, the editor, Dr. Frank P. Foster, in an editorial on this very subject, says: "Fowls have become infected by the sputa of tubercular patients, and hogs by the milk of cows in which there was tubercular disease of the udder and teats; the transmission of pulmonary tuberculosis in man from one individual to another is undoubted, and unless the bacillus tuberculosis is greatly modified in its passage through the lower animals, the danger of the infection travelling from animals to man would seem to be very great.

Many classes of the feathered race, I may here observe, are very prone to this disease; especially the common fowl, pigeon, partridge, and other grain-eating birds. Dr. T. W. Mills, Prof. Phys. McGill University, at the last December meeting of the Montreal Medico-Chirurgical Society, exhibited specimens from a tuberculous pigeon, a white Jacobin, bred by himself, which had died two days previously. The bird had been ill only three weeks, and was fairly well nourished at death. The tubercles were very widely distributed; the organs inflamed and bound together by recent adhesions. Owing to enlargement of the organs nd pressure, the apex of the heart was squeezed such an extent that it must have become funconless. Dr. Mills stated that no doubt many rds offered for sale on the market were subjects tuberculosis.

Now it may be argued that there is no direct oof of the transmission of tubercle from anals to man by the consumption of flesh and r. "Such proof, it need scarcely be said," argues Prof. Walley, of the Royal Vet. Col., Edinburgh, "cannot, for manifest reasons, be obtained, but the mass of indirect proof in favor of such supposition is enormous." But he adds, "Very recently a most striking example of the effects of consuming the flesh of a tuberculous animal has been brought to light by a French physician, in the case of a young woman who rapidly became consumptive as the result of eating the imperfectly cooked bodies of tuberculous fowls.

The flesh of tuberculous animals has evidently been suspected as dangerous from the earliest records. On the authority of Lydtin, Fleming and Van Hertsen, there existed in the Mosaic laws strict legislative rules condemnatory of the flesh of an animal affected with this disease. The laws embodied in the "Mischna" (the oldest part of the Talmud) distinctly refers to the prohibition of the use of such flesh. From that time onward, various ordinances have been instituted, with the object of checking the use of consumptive flesh, especially in France and the German States, and even in Spain, Italy and Switzerland; and severe punishment has at different times been inflicted upon butchers and others who have wilfully sold such flesh for human food.

That the milk of tuberculous cows is dangerous, there is more conclusive evidence than that the flesh is dangerous. Long before Koch's discovery of the tubercle bacillus, it had been accidentally and experimentelly demonstrated that milk was infective by ingestion to calves and other young animals; and, as Prof. Walley observes," there is a mass of evidence in favor of the view that by this vehicle the germs of the disease are conveyed from the cow to the human subject." The question of the infection of tuberculosis being conveyed by milk is of greater importance than is that of infection by flesh; for the two-fold reason, that the former is largely consumed by infants and generally in an uncooked state. The danger of contamination by milk will be more clearly comprehended when it is known that the tubercle bacillus can be readily detected in the lactiferous product of animals in whose udders tubercular lesions exist; and also, as has been shown by Professor Bang, of Copenhagen, in the milk of women in whose breasts the disease existed. Of the 600 cows examined by Dr. Woodward and Prof. McFadyean, already referred to, in six cases they de-

monstrated the presence of tubercle bacilli in the milk.

Prominent physicians both on this continent and in Europe maintain that tuberculosis is often imparted to human subjects by milk from diseased cows, and Prof. Bollinger, in a paper read not long ago in Munich, has sustained their position. He said that repeated experiments show that the milk of tuberculous beasts has a very decided contagious influence, and its noxious properties cannot always be expelled even by boiling. The Professor enjoined upon farmers the necessity of taking the strictest care of their stock, and upon people generally the greatest care as to the quality of the milk they use. Prof. D. E. Salmon, of the U. S. Bureau of Animal Industry, declares his belief that tuberculous milk is an exceedingly prolific source of consumption in the human family; and says there are clinical observations proving the transmission of tuberculosis from animals to man through the use of this fluid. Other U. S. authorities have expressed themselves in equally strong terms. One connected with this same Bureau, whose name I cannot recall, believes that half the cases of consumption in the United States are caused by tuberculous meat and milk. But let us come to something more definite. Prof. Walley says: "In 1872 I lost a child in Edinburgh under circumstances which allowed but of one explanation, viz., that he had contracted mesenteric tuberculosis through the medium of milk." A Mr. Cox, of the Army Veterinary Department, Eng., has related the particulars of a case which led to the same conclusion; as also has Mr. Hopkins, F.R.C.V.S., of Manchester. Fleming has referred to a similar case as occurring in a child of a surgeon in the United States, and a short time ago, says Walley, a case of mesenteric tuberculosis from the imbibition of milk occurred in the child of a well-known veterinary officer of the Privy Council. At a meeting of the Edinburgh Medico-Chirurgical Society held last year, Dr. Woodward, referred to some undoubted cases of transmission to man and the pig by the medium of milk. A few years ago, in a paper bearing upon this subject, which I had the privilege of reading before the Toronto Medical Society, I mentioned the two following cases, which had then just been recorded in the U.S. National Health Bulletin: One, by Mr. J. Shaw, V.S., Prof. of Vet. Med. in Cornell University; in Brooklyn, N. Y., a family cow was found in an advanced state of tuberculosis, and the owner, one William Martin, and his wife, were rapidly sinking under the same malady. In the other case, reported by Dr. Corlies, of New Jersey, a family cow, supposed to be suffering from lung plague, was found to be afflicted with tuberculosis instead, and the owner's wife, who had been making free use of the milk warm from the cow, was suffering from the same disease, but was persuaded to give up the use of the milk, when she underwent an immediate and decided improvement.

A more striking case than any one of these was recorded in the *Medical Press and Circular* a few months ago, by Denune, of Berne, the details of which are as follows: An infant, aged four months, belonging to a family whose history was absolutely negative in regard to tubercular affections, died of tuberculosis of the mesenteric glands; a fact confirmed by a post-mortem examination. The glands alone contained the bacilli; or, at least, none could be found in any other part of the body. The child had been fed with the milk of a cow which was kept for the special purpose. For the purpose of inquiry, the animal was killed and examined. The left lung and pleura were found to be studded with tubercle, in which the bacilli were easily detected. The milk first drawn yielded but negative results, bacteriologically, but the bacilli were found in portions of this fluid expressed from the deep parts of the mammary glands.

The journal alluded to regards this case as important from another point of view: as if, instead of a human infant, a calf had consumed the milk from its mother's udder, it would in all probability have become tuberculous, and the case would have been regarded as one of heredity.

According to Prof. Bang and others the cream and butter, and also the buttermilk, from tuberculous cows, have been shown to be as infectiv as the milk, if not more so. This is of th most serious importance of all; for althoug the milk and flesh can doubtless be so cooked a to be rendered safe, it is not so practicable to coo cream and butter

Now it becomes a question—Is the disease i Canada so prevalent among cows or other a imals as to create alarm or uneasiness? I shoul

say, at once, although not yet very prevalent, it is sufficiently so, in view of all the facts which I have brought before you to-night, with others yet to note, to give rise to much uneasiness, and indeed to more than this, if some decided action be not soon taken with the view of lessening the danger; as by a system of inspection of both cows and slaughtered beef, and of the education of the farming community in relation to the whole subject. I think I can bring before you evidence which would convince anyone, that now is the time to take some action, in order to avoid or prevent much more serious consequences in the near future.

I will first say a few words relating to the early symptoms of the disease in cows. A peculiarity of the disease which much increases our difficulty in deciding upon the point now under consideration, and which must not be overlooked, is the obscurity of the early symptoms. As Prof. Walley says: Under certain circumstances animals may become extensively diseased, and yet no suspicion of the fact be aroused in the minds of the owners of, or the attendants upon, such animals.

According to Fleming, the first perceptible signs are general dulness and indifference, and less activity and energy; with heightened sensibility of the skin, especially over the withers, back and loins, manifested by marked shrinking of the animal if these parts be pinched. There is exaggerated sexual desire—marked by continual or frequent periods of rutting; such animals being known as "bullers" (in France, as *taurelières*). They rarely breed, however, though they may now fatten or yield as much milk as if quite well. The milk is more watery, of a bluish tint, and less rich in nitrogenous matters, fat and sugar, but containing a larger proportion of alkaline salts. There is a dry, deep, though feeble cough, especially on exertion of the animal or on sudden change of temperature of the atmosphere, or on compression of the windpipe. There is not generally expectoration or nasal discharge, though at a later period exertion causes a flow of glairy mucus streaked with thick pus. The walls of the chest become more sensitive on percussion, or thumping, and there is a dull sound. By placing the ear on the chest one can often hear, instead of the smooth respiratory murmur of air passing in and out the lungs, as in health, a harsh, rasping or loud blowing sound, especially in some parts of the lungs. The heart's action is at times quicker and stronger; the skin, particularly towards the base of the horns and ears, is hot and dry; intermittent bleeding from the nose may take place; lameness, too, and enlargement of the glands about the neck and elsewhere. The above symptoms may continue, with little change, for months, but if no preventive or curative measures be adopted, the symptoms become intensified, and what is called the second stage of the disease is reached, and finally the third stage, with weak digestion, diarrhœa, emaciation, etc., but the symptoms of which I need not here detail.

Vet.-Surg. Grissonnanche, at the Paris Congress on tuberculosis, in July, stated that the disease is characterized from the first by tumefaction of the pharyngeal glands, irregular respiratory movements, a harsh friction sound on auscultation, with a short cough not easily provoked except by sharp percussion on the thoracic parietes, a procedure evidently causing pain to the animal.

Veyssiere, at the same congress, said that he had seized a very fat and apparently well-conditioned cow on account of symptoms of a local tuberculosis, and a post-mortem examination revealed tubercular lesions in the lungs and liver. He had injected some of the expressed juice of the meat of this cow into two rabbits, and both animals had died. Guinard said he had seen a lady patient drinking the fresh blood from a fine appearing animal, which was afterwards found to be tuberculous, and was condemned. You will remember that the pigeon, submitted by Prof. Mills, was fairly well nourished when it died.

From these facts it seems clear that the disease may be more common in any locality or country than would be apparent to the public or to any ordinary observer. Then it must be borne in mind, in considering the question of the frequency of cases, that if cows were allowed to die naturally, as human beings are virtually allowed to die, the proportion or number of cows succumbing to the disease would in all probability be much greater. Many a farmer, too, on the first signs of any failure in the health of his animal, will, from self interest, almost instinctively, at once sell it to the butcher.

Before bringing evidence before you as to the degree of prevalency of the disease in Canada, allow me to briefly quote authorities as to its prevalency in other countries: Dr. Heath, President

of the American Farmers' Club, some time ago, in the *London Medical Record*, stated that: This disease prevails extensively among such animals all over the world, and especially in populous and crowded localities. Observations in Mexico have led to the conclusion that thirty-four per cent. of all beasts slaughtered there were more or less affected with this disease, and probably fifty per cent. of the cows kept in large towns were thus diseased. The fact that this is not more generally recognized, is of course owing to the animals being slaughtered before the disorder has attained any very noticeable development. Mr. Salmon, Chief of the Washington Bureau of Animal Industry, at the last annual meeting of the A. P. H. A., declared that from "an inspection of about half a million" cattle, the "wide-spread prevalence of the disease is certain." In the second, and I think last, report of the Maine State Board of Health, is given in detail the history of the destruction by this disease of two very valuable herds within the past few years:—one, the Orono herd, in Maine; the other, that of the Willard Asylum farm, New York. At a recent meeting of the Butchers' Association in California, the agent there of the Bureau of Animal Industry, spoke strongly of the prevalence of the disease, of the "rottenness" of the cattle there, and of the great danger to the public health therefrom. At the last meeting of the British Medical Association, Dr. Alfred Carpenter said: "It had been his duty to hear evidence when application was made for the condemnation of tuberculous carcases, and that if all such meat were prohibited it would be impossible to feed such a population as that of London." One of the principal inspectors of the largest meat market in London, he said, stated in the evidence, that some times as much as eighty per cent. of the meat there on sale was so affected. At this same meeting Dr. Farquharson, M.P., after discussing the subject, said: Under these alarming circumstances he held it was the duty of the Government to deal seriously with it.

About two years ago I sent out questions to a large number of veterinary surgeons throughout Ontario, with the special object of finding out the facts as to the frequency or otherwise of cases of the disease in this Province. I received a good many replies, although not so many as I had hoped for. Collectively, these went to show that, in the opinion of the writers, the disease was not very common, but that on the whole there were a good many cases of it. Some of the respondents mentioned recent cases observed, while others wrote that although few cases came under their own observation, other veterinary surgeons had stated that they had observed many cases. One wrote, in effect, that he had reason to believe the disease common, but that stock-owners wished to keep it quiet; and he expressed a wish that his name should not be publicly mentioned in connection with this information.

At the opening address of Montreal Veterinary College in Oct, 1887, Dr. H. P. Howard, Dean of McGill Medical Faculty, in the chair, Mr. McEachren, chief veterinary surgeon of the Dominion, said: "The communicability of tuberculosis from animals to man has been proven beyond a doubt. . . . . The insidiousness of this disease makes it difficult to arouse the people to its danger. The milk supply is often tested by public analysts and police inspectors to prevent its adulteration by water, but no effort is made to prove the absence of disease-germs in the nutrient fluid which forms the chief diet of infants and invalids." He was "aware that this disease was on the increase among cattle in Canada, as elsewhere."

In the ninth annual report of the Agricultural College and Experimental Farm, Guelph, Ontario, it is stated that, "The extent to which this disease exists amongst the better breed of cattle in this country is alarming, for many reasons; not the least one of which is the danger to which the public are exposed from the consumption of meat from such animals. From an economic standpoint the outlook is serious, as the annual loss must be very great, and will continue to become greater as long as so little care is observed in the selection of healthy dams and sires."

Evidently, the belief that heredity is an important factor in causing the disease, still retains its hold upon veterinary surgeons to a much greater extent than upon the medical profession.

The president of the New Brunswick Medical Society, Dr. P. R. Inches, at the last annual meeting of the society, after alluding to a number of outbreaks of the disease and to the danger to the public health therefrom, said: "Since writing the foregoing, I have learned from a reliable source of the existence of the disease in this neighborhood.

Cases are met with not unfrequently, and it is only a few days ago that the termination of one of those cases took place. The animal—a Jersey cow—had been ailing for quite a time, and was examined by a leading veterinary surgeon, who diagnosed the case as one of tubercle." The animal was isolated, quarantined, and kept under observation. After death, an examination took place, which verified the diagnosis in every particular. The case was reported to the Department of Agriculture. The veterinary surgeon tells me, said Dr. Inches, that such cases are not rare, and that the milk of such animals is used, and no doubt their flesh often eaten. His last remark to me was, "that the medical profession will waken up some day to the importance of such cases of infectious disease, and insist upon measures to prevent its propagation."

Now, from the foregoing facts and from others so well known that I have not alluded to them, the whole question may be summed up, and the conclusions which may be reasonably drawn therefrom are, briefly, as follows:

1. That, as it has been long known that glanders and hydrophobia may be communicated from animals to man, and it has been clearly demonstrated that tuberculosis may be communicated from animal to animal, from man to man, and from man to animals; that the bacillus of tubercle found in all tuberculous matter is, in animals, so far as can be ascertained by the microscope, by their action in different culture media and their other biological characteristics, identical in every respect with the bacillus in the tuberculous matter in man; that many of the more highly organized parasites, such as tapeworm, trichina, and other forms, are common alike to both man and animals; that there are no known differences, physiological or chemical, between the constituents and structure of the various parts of the human body and those of the domestic animals, such as would lead to the conclusion that any parasitic organism which finds table conditions for its development in the lat- would not find equally suitable conditions in e former; that it appears that where cows are t to be found, tuberculosis is not common, or is ite unknown, and that many observers and in- tigators in both Europe and America declare, t wherever the disease is prevalent amongst , it is proportionately prevalent amongst the human population; and finally, that many cases of tuberculosis in human beings are upon record, in which tuberculous milk had been consumed as food, and as no other cause could be assigned, there was the strongest presumptive evidence that the milk was the source of the disease: it would, therefore, for these reasons, appear to be in a high degree unreasonable for us to refuse to receive as a fact the extreme probability, at least, that this disease may be, and not infrequently is, conveyed to the human body by the meat, milk and butter of tuberculous cows.

2. That although cases of tuberculous disease in cows are not known to be very common in Canada, it must be remembered that, from the attention of the public not having been specially drawn to the subject, the disease has not been suspected or looked for; that there is abundant evidence that the disease is prevalent in many parts of the adjoining States, many entire herds there having been destroyed by it, while one of the inspectors of the largest meat market in London, Eng., in evidence before Dr. Carpenter, has declared that sometimes as much as 80 per cent. of the meat examined there was tuberculous; that a report of the Experimental Farm at Guelph, Ontario, states that "the extent to which this disease exists amongst the better breeds of cattle in this country is alarming"; that the chief veterinary surgeon of the Dominion, Mr. McEachren, states that the disease is on the increase among cattle in Canada, as elsewhere, while other veterinary surgeons say it is not rare amongst us, and at least one entire herd in Nova Scotia has been destroyed by it; that the insidious nature of the disease causes it to be overlooked, and makes it difficult to arouse the public to its occurrence and danger; that according to the best authorities, cows may be tuberculous in a marked degree and yet continue to thrive and give abundance of milk, containing the tubercle bacilli, and yet the disease not be suspected by the owner or attendant; that as cows are not allowed to die naturally, but are slaughtered for the market, and doubtless in some cases tuberculous cows are thus disposed of before the disease has attained noticeable development, and that even in the known early symptoms of the disease—in individual cases—such animals would as a rule be sold by the owners to the butcher to prevent loss; and, finally, that in Canada there is no

system of inspection of either live animals or slaughtered carcases by which the proportion of cases of the disease might be estimated; it is therefore possible, and even probable, that cases of tuberculosis in cows are of much more frequent occurrence in this country than may seem at present to be the case, and that tuberculous meat, milk and butter may now be sometimes sold in the market and be a cause of tuberculosis or consumption in the human organism.

3. That this disease is well known to be infectious; that it is the rule with infectious diseases that, when no special means is employed to prevent their spread, cases will become more and more frequent, and in a constantly increasing ratio,—one case giving rise to two, three or four cases, and these again giving rise to probably four, nine or sixteen other cases; and it is to be feared that if some preventive measures be not employed, the disease may, and is likely to, soon become as prevalent amongst cows in Canada as in any other country; and that, therefore, it is most desirable, and in the interests, not only of the public health, but of all stock growers and dairymen, that some means be put into practice at the earliest possible time, with the view of preventing, while it is yet the easier to do so, the spread and increase of the disease.

CLINIC—BY T. GAILLARD THOMAS, M.D.

Prof. of Gynæcology at the College of Physicians and Surgeons, New York, etc.

This first patient has been married ten years, is a native of New Jersey, and was perfectly well up to the birth of her last child—which event occurred two years ago. As you look at her you are at once struck by two facts: first, she is excessively pallid, in the next place she does not impress you as a woman in perfect health. These are all that you observe by simple inspection. I will ask her some questions. How long have you been sick? Ans.—Two years. This is the old, old story: two years ago had the last child and ever since has been unwell; this is a very common fact, and you will meet with it again and again. At the time of her last birth she had a severe hæmorrhage and the physicians in attendance expected her to die; at that time she did not faint, but ever since has been subject to fainting spells. She menstruates every month and is unwell for two weeks; this fact alone will explain her pallor. There are only twenty-eight days in the menstrual cycle, so that she has no time to recuperate, and as she loses a great deal of blood, she naturally gets very weak.

She suffers from cerebral anæmia; the supply of blood to the brain is small; the result of this is sometimes serious, at times she has vertigo and faints away; it was only last night she fainted, so she may be said to suffer from syncope. Syncope is a temporary cessation of the heart's action, and is secondary to something else; it is always directly due to cerebral anæmia, so that the brain does not act properly on the heart through the nervous system. During menstruation she suffers from great pain; every pain is like a labor pain; this, however, does not end in the expulsion of anything. Suppose this patient comes to you for treatment, your first case of menorrhagia; her pulse is now over 100; if a patient like this comes to your office, the first thing to do is to find out the cause, as in this case; the treatment is simple. If you cannot find out the cause, do not treat the case. Let me now tell you some of the causes of menorrhagia and metrorrhagia; not all by any means, only a few, so that you may be enabled to think out the remaining causes for yourself.

CAUSES OF MENORRHAGIA AND METRORRHAGIA.

The difference between menorrhagia and metrorrhagia is this: A woman ought to menstruate from four to eight days; if she menstruates more, then menorrhagia begins. If she flows between the menstrual periods, then it is metrorrhagia, or uterine hæmorrhage.

I. *Those due to the blood state:* as hæmophilia, scorbutus, spanæmia, and all causes due to depraved blood state and blood-vessels; this is one of the most important causes. Uterine hæmorrhage is now known to be due to rupturing of blood-vessels, and not to mere sweating of blood, as was formerly supposed.

II. *Solutions of continuity:* as (1) Lacerated cervix is a very common cause. (2) Carcinomatous and sarcomatous ulcers; hæmorrhage from these is very free. If a woman has ceased menstruating for five years and then she starts to flow freely every month, nineteen chances out of twenty there is cancer, and on examination the mystery is cleared up.

III. *Any abnormal growth connected with the*

uterus. An example is a uterine fibroid, either subperitoneal, interstitial, or submucous; also polypi. Other growths inside of the uterus will cause it, as the following case illustrates. The wife of a clergyman living outside of New York, expected to be confined last November; she went to bed, the nurse was engaged, but, on examination, the physician found the uterus only slightly enlarged. I was called in consultation, and after carefully examining the case, came to the conclusion that it was one of moles; the fœtus had died and membranes had clung to the uterus and continued to develop. I emptied the uterus of its contents and the patient is now entirely well. Under this head is included fungoid growths of the uterine cavity, which is a very common cause.

IV. *Anything that keeps up uterine engorgement.* As all flexions; flexions are very likely to occur just after parturition, when the uterine tissues are very soft. The various forms of endometritis, all ovarian irritation, may be accompanied by menorrhagia. If you take a rabbit, etherize it, lay open the uterus so that you can observe the endometrium, then, with a pair of forceps, crush the ovaries, the lining membrane of the uterus will be seen to become intensely engorged with blood. Again, many women think that it is a virtue to have a movement only once a week; these women constantly suffer from menorrhagia, this causes a varicose condition of the uterine veins. Many of the most remarkable cures I have performed, have been done by attention to the simple rules of alvine evacuation. All ovarian tumors, from pressure effects, may cause menorrhagia. To recapitulate, the causes are—

I. Blood state.

II. Solution of continuity.

III. Abnormal growths.

IV. Congestion of uterus.

Now, to find out the cause of this patient's menorrhagia. She tells us that she was perfectly ll up to two years ago. On examination, I d the cervix lacerated, but this is not enough account for the hæmorrhage; on pushing the er further up in the anterior fornix, I feel a rt anteflexion. A diagnosis is always a probaity, never a certainty. During her last conment, the cervix was torn, involution went on wly, patient got up too soon and went about duties, anteflexion took place, the uterine veins were interfered with, and fungoid growths were formed in the uterus; this is all that happened, yet it is enough to cause all the trouble.

Treatment.—This patient can be entirely cured by simply going backward and correcting each step in the pathological process. Administer an anæsthetic and place the patient in the dorsal decubitus, and thoroughly douche the vagina with 1-2000 bichloride solution; then take a uterine sound and gradually straighten the uterus. Then with a blunt curette (even this is not necessary, for while out of town, I have often curetted a woman with a hairpin and a pair of forceps), carefully scrape out the fungoid growths, and be sure that they are all scraped out. Then take some cotton on a pair of long forceps and swab out the uterus with a 1-1000 bichloride solution, or, preferably, irrigate with an intra-uterine catheter. Next, pare the edges of the lacerated cervix and close it with silver sutures. Take a perforated intra-uterine glass stem and place it in position, so as to keep the uterus perfectly erect. Keep the patient in bed, put her on small doses of ergot to contract the uterine tissue and vessels. In two weeks take out the sutures, but the stem may be left in for some time, and you will find that gradually she will menstruate for only five or six days. Tell them that the first menstruatfon is always profuse. Instead of this woman looking pallid and thin as she does now, in six months she will have some color, weigh fifteen to twenty pounds more, and have no further trouble from syncope.

In all probability if this patient, with her pallid looks and anæmic basic murmur, had gone to an ordinary practitioner, nineteen cases out of twenty he would have given her quinine and iron. Both these medicines are powerful tonics and act as veritable poisons to patients suffering from menorrhagia; in amenorrhœa they should always be given.

REPORTS OF CASES.

To the Editor of the CANADA LANCET.

SIR,—I have thought the following case of sufficient interest to report it.

Mrs. M., multipara, was confined on Dec. 29th. Her labor was easy and natural, and the puerperium was perfectly normal until the seventh day, when she complained of having had a severe paroxysmal pain in the right inguinal region at times

during the preceding night. Upon palpation that region was found slightly sensitive to pressure; pulse 72, temp. 100.5°. Ordered her a saline mixture and vaginal injections of warm water. 8th day. No paroxysms of pain, slight tenderness in right inguinal region; pulse 72, temp. 100.5°; continued treatment. 9th day, 12.30 a.m. Was hastily summoned to see patient; found her suffering intense pain in the lower part of the abdomen, which the nurse said had come on suddenly after the patient had assumed the semi-erect posture to pass urine. Upon examination found abdomen greatly enlarged and tympanitic and tender on palpation, countenance pinched and anxious; temp. 101.5°, pulse 80. Ordered linseed meal poultices to abdomen, quinine sulphate gr. iij. every four hours, morphiæ sulph. gr. ⅛ every hour till pain relieved; liquid diet. 10 a.m. Patient feels much easier; temp. 101.5°, pulse 80, other symptoms unchanged. Patient has received four tablets of morph. sulp. ⅛ gr since last visit. Morphia to be discontinued unless paroxysmal pain returns, other treatment continued. 2 p.m., temp. 102.2°, pulse 80. 6.30 p.m. Had consultation with Dr. U. Ogden. Temp. 102°, pulse 80. Tympanitis is extreme, the abdomen being fully as much enlarged as before her confinement. Upon palpation tenderness extends as high as umbilicus. It was decided to administer the quinia per rectum and increase the amount given to 7½ grains every four hours, in the hope that it would stimulate the coats of the intestines to contract and expel the large amount of flatus.

10th day, a.m. Nurse reports that during the night some flatus escaped, patient has had no recurrence of paroxysmal pain; abdominal distension not as marked as at last visit; temp. 99°, pulse 72. Discontinued quinine and ordered sodæ et potassæ tart. ʒj. every three hours, and injections of tepid water to be repeated every two hours. 6 p.m. During the day injections have brought away a small amount of fæcal matter, some flatus also escaping; temp. and pulse same as morning. Abdominal walls were relaxed, and less tympanitic; patient bears ordinary palpation of abdomen without any complaint. Same treatment to be continued, also ʒj. whiskey every two hours.

11th day. During the night patient has had considerable rest and taken nourishment well; passed some feculent matter and flatus and appeared to be progressing favorably until about 7.30 a.m., when nurse became alarmed at her condition and sent for me. At 8 a.m. I found her in collapse; extremities cold and whole body covered with a cold, clammy perspiration. Pulse 80, very soft and compressible; temp. 97° in rectum. Complained of nausea and faintness; abdomen was much distended, no tenderness. Applied artificial heat by means of bottles of hot water to body and extremities, as well as friction. The perspiration was excessive, standing out in great drops over the entire surface, almost immediately after it had been removed by towels. Administered six syringefuls of whiskey hypodermatically, and gave small quantity by the mouth during first hour. Patient then vomited a large quantity of partially digested food, and this relieved the nausea, so that she was able to take ℥ss. whiskey every fifteen minutes by the mouth. This treatment was continued. About two p.m. there were some evidences of reaction, and by 5 p.m. natural heat was restored to the surface and perspiration had abated. At 6.30 had another consultation with Dr. U. Ogden. Pulse 80, weak, temp. 99°. Tympanitis was now considerably increased again; no tenderness. Treatment ʒiv. whiskey, ℥j. egg and milk mixture every hour. Rectal injection of castor oil and turpentine in thin starch. 9 p.m. No action of bowels; repeated injection, omitting turpentine. Injection was retained for two hours and then expelled. Then ordered an injection of four ounces warm castor oil.

12th day, 9 a.m. Bowels have not acted during night. Patient has taken nourishment well, and appears stronger; pulse 72, temp. 99°. Ordered ℥j. castor oil and 10 ♏. turpentine by mouth. At 12 o'clock there was a movement of the bowels, containing some lumps of hardened fæcal matter, but principally composed of softened fæcal matter and oil in an active state of fermentation, the gases making their way to the surface of the mass at all parts while under observation. The amount passed at this evacuation filled the bed-pan, a large amount of flatus also escaped. Bowels continued to act during afternoon, in all, four times, one of the dejections being as large as the above, the others somewhat smaller. 6 p.m. No tenderness, no tympanitis; pulse 72, temp. 99.5°.

13th day. Patient is improving; takes nourishment well, has no pain.

After this date convalescence progressed speedily and uninterruptedly. The remarkable feature of this case was the sudden and unexpected onset of collapse on the morning of the 11th day, which was no doubt due to the absorption of the products of fermentation of the matters contained in the intestinal canal. Patient was unable to account for so large an accumulation of fæcal matters in the intestines, as she says bowels were always regular before her confinement. And subsequent to that time and previous to the onset of the symptoms detailed above, she had taken three doses of castor oil, after each of which the bowels acted freely. The subject of ptomaine poisoning has been receiving considerable attention of late years, and from the variety of symptoms produced by these fermentation products, it is evident that the products themselves are different in almost every case, some slight cause being sufficient to change the type of fermentation. We sometimes see them accompanied by very irritant properties. In the present instance the action seems to have been more that of an antipyretic and depressant. I might also say that repeated examination of urine failed to reveal any kidney trouble.

Yours truly,

L. F. MILLAR.

86 Brunswick Ave., Toronto.

Correspondence.

OUR NEW YORK REPORT.

From our own Correspondent

NEW YORK, Feb. 19th.

"A NEW METHOD OF TREATING FRACTURES OF THE PATELLA BY SUBCUTANEOUS LIGATURE WITH SILK."

Prof. Lewis A. Stimson, who is probably the recognized authority on fractures and dislocations in New York, is just now advocating a novel and to all appearances an exceedingly simple and rational method of treating fractures of the Patella. It is known as the subcutaneous ligature with silk method. The great desideratum to be obtained in the treatment of these fractures is some simple appliance whereby the fragments may be held in close apposition, and at the same time one which will not interfere with the nutrition of the patella by pressure on the articular arteries and thus prevent rapid union; it is now believed that this difficulty has at last been overcome.

The method of procedure is as follows: suppose, for example, the patient has a transverse fracture of the right patella. The patient is etherized and the skin over the part thoroughly scrubbed with soap and water, then douched with 1-2000 bichloride, and finally washed with ether. With an ordinary scalpel, four incisions are made in the following manner: the skin and subcutaneous tissue only being divided, and, for the sake of description, we will suppose the patella to be possessed of four angles. The incisions are so placed, that each angle of the patella has an incision situated a little distance from it, thus; the *first* is situated a little below the inferior and internal angle, the *second* a little below the inferior and external angle, the *third* a little above the superior and internal angle, the *fourth* a little above the superior and external angle. Then a straight Hagedorn needle armed with a No. 14 heavy braided silk ligature, which has been previously rendered perfectly aseptic by being boiled (one of the essentials of success is that there shall be no suppuration), is introduced into the lower and internal incision and carried deeply through the ligamentum patellæ and brought out at the inferior and external incision. It is then re-introduced and carried deeply through the tendon of the rectus and crureus muscles and brought out at the superior and internal incision. It is again re-introduced and carried beneath the skin along the internal border of the patella, and brought out at the interior and internal incision. The leg is now elevated so as to relax the quadriceps extensor as much as possible, in order that the fragments of the patella may be as closely approximated as possible. Strong traction is now made on the silk and the two ends are firmly knotted deep in the subcutaneous tissue. During this part of the operation considerable force may be used so as to bring the fragments closely together. The cutaneous wounds are then irrigated and dressed with a simple antiseptic dressing, the leg elevated, and a straight posterior splint applied for about three days. At the end of this time the dressings are removed, and if proper antiseptic precautions have been taken, the incisions will be found completely healed. The knee is then encased with a

plaster paris dressing for two weeks, when it is taken off, and the patient allowed to hobble around the ward on crutches, and gradually use his leg. As to the length of time the plaster bandage should be worn in order to secure the best results, it may be stated that this point has not been determined, as the method has not yet had sufficient trial in order to decide this point. So far, however, the cases in which it was discarded after two weeks' use appear to have done the best, as the union seemed quite as firm as those cases in which it had been worn for four weeks, and there was less stiffness of the knee. In every case, so far, very satisfactory results have been obtained, and in one case which your correspondent had the opportunity to examine, after three weeks the separation was less than ¼ of an inch. It is recommended that if the case comes under observation before inflammation and effusion into the joint have taken place, to at once perform the operation; but if inflammation and effusion have taken place, it is better to wait until they have subsided. Some may ask, what eventually becomes of the silk. In the cases so far nothing has been seen of it, which is due to antiseptic precautions, and it remains under the skin, acting as a firm splint, holding the fragments together, and this explains why the plaster paris dressing can be discarded so early. To contrast the results obtained by this method and those by wiring, would be premature, as the method has only been on trial for a short time, but it may be stated that wiring the patella has fallen into disrepute in New York. In nearly every case it has resulted in a stiff knee-joint, and in some suppurative synovitis has followed, so that the joint was completely anchylosed, and many surgeons here have almost abandoned the operation and fallen back to the old method of splints, etc., except in those odd cases where the separation of the fragments has been so great as to render the limb almost useless. The one is a grave operation, the other a simple procedure, and the general impression is, that it is the best plan yet proposed, and is destined to completely revolutionize the treatment of this important fracture.

For Hiccough.—Dr. Wm. C. Wood, writing to the *Med. Reg.*, speaks in high terms of viburnum prunifolium in singultus. He states that drop doses of the fluid extract never fail to relieve.

Selected Articles.

MENSTRUATION, ITS NERVE-ORIGIN—NOT A SHEDDING OF MUCOUS MEMBRANE.

In every healthy human female, during the so-called childbearing epoch, which extends, on the average, over a period of thirty-two years, the uterus becomes the seat of a periodically recurring functional disturbance, evidenced by the emission of a more or less marked hæmorrhagic discharge. As the initial establishment and each subsequent recurrence of this monthly phenomenon is frequently accompanied by symptoms of a general as well as local character, we shall designate under the appellation *menstruation* the whole essential train of events, and not its mere outward manifestation.

The molecular world, organic as well as inorganic, exists in a perpetual state of trepidation, and equilibration of a vital character is the outcome of an inherent power of adaptation. Normally the structural and functional integrity of the organism is maintained by a mutual dependence of the organs upon each other, and according to the manner in which these, each and all, respond to those multifarious changes which, from time to time, arise in the environments of the individual. The variations in the waves of molecular motion occurring in every organ, and associated with physiological activity, are radiated to, and affect, however feebly, every ultimate tissue of the body. So completely is this intercommunication, through the medium of the nervous system, carried on, and so apt are the different structures of the organism to perform functions other than those for which they have apparently become specialized, that vicarious compensation may be readily established. In the case of double organs it is a noteworthy fact with which everyone is familiar, that the removal of one may affect but little, if at all, the well-being of the body; generally the remaining organ at the same time becomes of augmented functional activity, undergoing slight or even well-marked enlargement. This compensatory change will be manifested, not only by organs recognized as active, but also by such as have hitherto been viewed as obsolete. In many of the lower organisms, where structural differentiation is ill defined, vicarious function is readily fulfilled. The animal may, for example, be turned outside-in with impunity, the vital integrity of the organism being still maintained unimpaired—the endoderm, already but feebly specialized, although set apart for assimilation, performing with ease the function of the ectoderm that of elimination; while the ectoderm, in turn assumes forthwith the power of assimilation, an

discharges effectually a function hitherto foreign to it and performed previously by the inner layer. In the animal economy we see constantly enunciated the fact, too frequently ignored, that functional activity and structural integrity proceed together, hand-in-hand, and are regulated by a mutual action and re-action upon each other.

If the functional activity of any organ be augmented, but not unduly, the structural integrity will be maintained and be rendered more perfect. Again, the more complete the structural arrangement has become, the more likely we are to find the function actively performed. All visceral activities are now, through habituation, fulfilled in a somewhat automatic manner; and although these transitional states may at one time have excited a conscious sensation, they are at the present stage of evolution wholly ignored by the higher cells of the cerebral lobes which participate in feeling. What is true of one organ of the body is likewise true of all the others. It is, therefore, more than probable that the physiological changes recurring from time to time in the uterus are anticipated by, and in reality the sequence of, a molecular disturbance arising spontaneously in some center located in the higher part of the cerebro-spinal tract, possibly somewhere in the medulla oblongata. The mere fact that the functions of the uterus may be revealed uninterruptedly after the spinal cord has been completely severed in the dorsal region is no criterion, and cannot justify us in concluding that there exists no representative higher centre. Structural evolution itself forbids the acceptance of such an hypothesis. Like all other nerve centres fulfilling a similar dispensation, this uterine centre is undoubtedly beyond all volitional control, but is, nevertheless, capable of being disordered by emotional impressions. With this fact everyone is familiar. A sudden shock experienced during menstruation, and apart from any bodily injury, will produce, as I have frequently noted in some females, immediate cessation of the flow, and even interrupt for a more or less indefinite length of time thereafter, its amount and periodic regularity. The resulting disturbance will depend essentially upon the state of the nervous system and its proneness to molecular instability.

With the approach and appearance of the monthly flow the whole frame, as one would naturally expect, participates more or less in the change, nd the amount of disturbance experienced, as ell as manifested, is commensurate with the ower the organism possesses of adaptation, and ence of equilibration. The simple determination blood, because of increased functional activity, the genital and, in many cases, to the other lvic organs, of itself produces a definite altera- on in the waves of molecular motion proceeding erefrom, and which, radiated in all directions, must necessarily affect the vascular state of other very important structures. In many chronic disorders, of whatever system, affecting the female, every observer must have remarked that, according to the menstrual type of the individual, there is often, either in anticipation or with the appearance of flow, a proneness to aggravation, or in some very exceptional cases, it may be, to alleviation of symptoms; and with the cessation or disappearance a corresponding gradual reversion to the original already stationary or slowly progressive state. In some few cases the loss of blood may account for much of the disturbance manifested, yet it cannot be the sole factor. In many women, where, from some inexplicable cause, there is for a more or less indefinite period a total suppression of the characteristic discharge, we may detect frequently such a regularly recurring alteration in the symptoms or manner of the patient as to place beyond denial a direct relationship. In no class of functional disorders do we find so regularly and markedly an interference with the outward manifestation of uterine activity as in *epilepsy*, a disease the pathology of which is still undetermined. It is more than probable, however, that as we may consider the *epileptic female* as *epileptic* throughout, even to the finger-tips, the interruption of the periodically recurring functional change in the uterus is the result of some occult condition of the corpuscular elements governing the activity of this organ, and wholly independent of any defective structural state of the viscus itself. The structural integrity of the uterus, may, however, eventually suffer, for inaction and overaction alike tend to exert a prejudicial influence.

Gestation, as a rule, although not invariably, determines for a period of nine months a cessation of the monthly recurring flow. Not infrequently, however, we see women who throughout one or more pregnancies continue perfectly regular, the amount or character of the flow being unaltered by the physiological process going on in the uterus. Usually the fertilized ovum affects in some unknown manner the uterine organ, thereafter destined to be its source of nutrition, and the gradual molecular variations so produced are radiated to the uterine centre, after the corpuscular state, and determine the sequence of events. During the period of lactation, and consequent activity of the mammary glands, we find not only the manifestation of the monthly recurring functional change of the uterus held in abeyance, but also the activity of the generative glands, as impregnation rarely occurs while the mother continues to suckle the offspring. Should, however, lactation be prolonged indefinitely, the secretion of milk may become more or less habitual, as in the case of the cow, and the generative glands regain their activity. The life of every organism is twofold: first,

the maintenance of the individual, and then the perpetuation of the species. The latter, however, is always subservient to the former, and so long as there exists a demand for nourishment from the mother on the part of the child in utero, so long will the reproductive power, as a rule, continue latent. Occasionally, however, I have noted that while the child is being suckled by the mother, the uterus itself, and the generative glands, may throughout continue active; and impregnation resulting, signs of early constitutional enfeeblement are apt to accrue. In inflammation of the mucous lining of the Fallopian tubes with puro-fibrinous exudation, menorrhagia is frequently an asssociated symptom, and apparently results from some interference with the nerve supply to the uterus. In all mammals there are two ovaries, and the oviducts are known as the Fallopian tubes. Each oviduct dilates, on its way to the external surface, into a uterine cavity, which in turn opens into the vagina. In the monkey and man only do we find the uteri coalesce inferiorily, producing a single cavity, into the fundus of which the Fallopian tubes enter. It is more than likely that the nerves governing the functions of the uterus are transmitted along the Fallopian tubes, and although menstrual disorder may frequently result, with distinct pathological changes existing in these tubes, we must not too hastily conclude that these structures, *per se*, govern the uterine changes.

The true nature of the catamenial discharge is still conjectural; yet its elimination from the body renders it highly probable that, having already served some special end, its detention in the blood may exert some deleterious influence on the animal economy.

It is generally admitted that ovulation and menstruation are coincident; that they may or may not be, I am not prepared to dispute; that, however, they are invariably associated, there seems to me much room for doubt. That the discharge of an ovum may, and frequently does, occur quite independently of menstruation, I have no misgivings. No one would entertain the idea of gauging the reproductive power of the female either from the regularity or amount of the catamenial discharge. I have occasionally noted that women who menstruate with marked irregularity are specially prolific.

It is alleged as an established theorem, that from the period of puberty to the climacteric age there is, besides a gradual death of the mucous membrane lining the whole uterine cavity—which must ever occur to be compatible with life—a more or less regularly recurring and complete death of this coat. In the whole animal kingdom we search in vain for a physiological change truly analogous with this. The serpent, it is true, may shed its skin more or less intact; but ere it casts off the old coat a new one is already regenerated, to protect its body from all extraneous injurious influences. In vital structures change is wont to be gradual — creation and destruction proceed together. There is apparently no departure from this inexorable law. Death of the mucous lining of the uterus takes place imperceptibly; the change is one ever going on, as in all organs of the body.

In several cases I have examined uteri removed from women who have died, not only during menstruation, but just before an expected period. In two cases the death was sudden, the patient at the time being in apparent good health. In three cases the uterine organ was invaded by growths of a fibroid character, which were chiefly submucoid. To the naked eye the mucous lining, in all, appeared in every respect like that of a normal uterus examined at any time indiscriminately. In no case did I detect any breach in the continuity of the lining membrane of the uterus, except in those in which this organ had become the seat of fibroid growths. In such the mucous lining had in places become markedly thinned, or even vanished altogether, because of a constant vital pressure exerted on this coat by the underlying new growth. Here gradual absorption had resulted, very much in the same manner as bone and soft tissues disappear before the constant pressure of an increasing aneurism. I have never at any time detected any evidence of structural change, microscopically, in the inner linings of the uterus, in cases in which this organ has been removed from the bodies of females who have died either during or just before an expected menstruation. The glands which stud the inner coat of the uterus in its entirety, consisting of columnar cells, lined by a basement as well as a limiting membrane, have, however, shown marked enlargement, in many cases so pronounced that the outline, not only of the separate cells, but even that of the gland itself, has been lost. The columnar cells appear swollen, and contain frequently large corpuscular-looking bodies, which I believe to be the simple manifestation of increased functional activity. Prior to cutting, by freezing in gum the tissues had been hardened for two days in spirits, and finally in a weak solution of chromic acid. The sections I stained in a variety of ways, my best stain, however, and that affording clearest definition, being *iron* and *pyrogallic acid*.

Those who support the denudation theory assert that each recurring monthly flow is anticipated by a fatty degeneration of the mucous lining of the uterus; that blood is extravasated into its sub stance, and eventually the whole, becoming disintegrated, is washed away imperceptibly with the escaped blood. A new mucous membrane is thereafter by degrees regenerated from the inner layer of the muscular coat, which, in its turn, too, like its predecessor, must undergo a similar degen-

erative change, and ultimately be removed from the body. Some of the lower animals, it is true, retain the power of reproducing limbs and possibly other parts of the body removed by accident. If, however, the separation of the part be too frequently practiced, we eventually exhaust the power —wholly irrecoverable—the structural integrity of the regenerated limb or tissue becoming less and less marked with each removal. Clinically, if the mucous membrane were shed with each catamenial flow, it must be capable of completing its cycle of degeneration, shedding and regeneration, in an incredible number of days. Many are the menstrual anomalies which preclude the acceptance of such a phenomenon.

Taking all the facts into consideration, it is more than probable that the recurring monthly discharge in the human female is a secretion, or rather excretion, from the inner lining of the uterus and Fallopian tubes, without degenerative change other than that commonly associated with augmented functional activity, and comparable with that occurring in any other organ of the body under similar circumstances.—*Alienist and Neurologist.*

ON PHANTOM TUMORS OF THE ABDOMEN.

Phantom tumors may present themselves in any part of the abdominal cavity. They vary in size and shape, but they rarely exceed a man's fist in size, and are usually of an oval or rounded shape. They may be as large as a child's head. The epigastric region is their favorite situation. Their peculiarities are that they are very variable in their appearance; a tumor may be found at the first examination, but on the succeeding day it may have entirely disappeared, and perhaps during the examination it will again become evident. These tumors come and go without apparent reason. When present they often closely simulate actual growths, being quite resistant to pressure and usually somewhat sensitive. On percussion they are somewhat resonant; at other times they yield but little resonance, the note indicating that there is a considerable amount of solid matter between the finger and any gas in the intestine. These tumors are for the most part movable. They appear in persons of a neurotic temperament and are associated with other phenomena of disturbed innervation.

Phantom tumors are dependent upon one or two things: Either upon irregular muscular contractions in the walls of the abdomen, with spasm of certain groups of fibres and the formation of knots in the muscles, or else upon spasmodic contraction of some part of the gastro-intestinal canal, with the imprisonment of gas and the formation of a rounded tumor, with the walls of the intestine in a state of spasm and with the abdominal muscles grasping it more or less spasmodically. This accumulation of gas may take place in the colon, in the small intestine, or even in a portion of the stomach. These bodies will often simulate intra-abdominal growths of various kinds. Their proper nature is to be recognized by a consideration of the general health, the peculiar neurotic state of the system, the variability as regards the presence of the tumor and its position, the absence of symptoms of obstruction of the stomach or intestines, the result of careful palpation, the fact that the tumor will sometimes disappear under the use of gentle manipulations and suddenly reappear when the surface is irritated, and the fact that the tumor entirely disappears when the patient is etherized.

Phantom tumors are not to be confounded with the movable abdominal tumors which come and go, and which are actual tumors, such, for instance, a floating spleen, a floating kidney, or a fibroid tumor of the uterus with a long pedicle allowing it to appear in different parts of the abdomen. All these floating tumors disappear at times to reappear when the patient assumes a different posture, or when the relations of gastro-intestinal canals are altered. These are to be distinguished by slight character of the general symptoms, by the absence, in the case of the kidney and spleen, of the organ from its normal position as revealed by percussion, and by the fact that they admit of careful palpation, and can be grasped by the hand, and, if the patient is etherized, can be examined minutely so as to remove every possibility of doubt. Moreover, in the case of a uterine fibroid, it can often be pressed down so as to admit of bimanual examination with one hand in the vagina and the other on the abdomen. A consideration of these facts, with the long duration of the tumor and the previous history which points to conditions that would favor the displacement of an organ, will enable you to decide that there is a true abdominal tumor.

I should have mentioned before, that, in distinction between phantom tumors and movable tumors of the abdomen, nothing requires more careful consideration than the possibility of fæcal accumulation. This must never be absent from our minds whenever we approach a case of abdominal disease, for fæcal accumulation is a factor in a vast number of instances of abdominal trouble. When a mass is found in the abdominal cavity, no matter what its position, size, shape, or consistence, the possibility of its being a fæcal accumulation is never to be forgotten. This is especially true if the mass is oval in shape, somewhat movable, not very painful, and not associated with evidence of marked derangement of the general health.

The treatment should consist in the regulation of the diet, attention to the bowels, and the use

of remedies to allay the nervous condition of the stomach and the hyperæsthesia of the abdomen. For this purpose I order four or five grains of bromide of sodium and a drop of dilute hydrocyanic acid to be taken after meals. The patient should also take with the meals a little pepsim. In order to draw the attention from the stomach, it is, I think, well to apply to the epigastric region some strong counter-irritant. I should have tincture of iodine repeatedly applied over this part of the abdomen. Under this treatment there should be decided improvement.—Wm. Pepper, M. D., in *N. Y. Med. Jour.*

CREASOTE IN THE TREATMENT OF PHTHISIS.

In a recent number of the *New York Medical Journal* and in the *American Journal of Medical Sciences* for January, 1889, are articles by Drs. Austin Flint and Beverley Robinson, in which the use of creasote in pulmonary affections is commended.

Dr. Flint's cases (reported) were well marked cases of phthisis pulmonalis, and were treated by creasote inhalations from a perforated zinc inhaler (Hazard, Hazard & Co.) and by the same medicine given internally in the dose of three or four drops t.i.d. The inhaling fluid (Beverley Robinson's formula) consisted of equal parts of spirits chloroform, alcohol, and creasote; the inhalers were generally worn almost constantly except at night. Dr. Flint concludes that the records of the ten cases reported show that creasote by the stomach and in inhalations, in cases of solidification without cavities, effects prompt and decided improvement in all phthisical symptoms, with increase in appetite, weight, and strength; in cases with small cavities there is much less improvement; and in cases with large cavities the treatment seems to have little more than a palliative influence.

Dr. Beverley Robinson's article gives the results of the use of creasote by mouth and by inhalations in sixty-six cases. These results have convinced him that "we have in beechwood creasote a remedy of great value in the treatment of pulmonary phthisis, particularly during the first stage. Not only does it lessen or cure cough, diminish, favorably change, and occasionally stop, sputa, relieve dyspnœa in very many instances; it also often increases appetite, promotes nutrition, and arrests night sweats. It does not occasion hæmoptysis, and rarely causes disturbance of the stomach or bowels except in cases in which it is given in too large doses."

Dr. Robinson does not venture any opinion as to whether creasote has any anti-bacillary effect; he affirms, however, that it may be used to advantage in all stages of the disease, and in his experience it has proven itself superior to any other medicinal treatment with which he is familiar. He has been in the habit of ordering in phthisis dessert spoonful doses of the mistura creasoti of the United States Pharmacopœa. He combines the internal use of creasote with the antiseptic inhalations above mentioned. The formula is, however, ever varied; a combination of chloroform, iodoform and oil of eucalyptus with the creasote often being used. As a rule, in the beginning, the inhaler is worn during fifteen or twenty minutes every three hours, and from ten to twenty drops of the inhaling fluid are poured on the sponge of the inhaler at least three times in twenty-four hours. Dr. Robinson speaks well of the internal administration or creasote along with cod-liver oil, one minim to the drachm of the oil. Another favorite way of giving creasote is in combination with whiskey and glycerine according to the following formula:—

℞.—Creasoti (beechwood). . . min. vi.
Glycerine (Price's or Bower's). ʒ i.
Whiskey. . . . . ʒ ii.
M.—Dose. A dessertspoonful every two or three hours.

Dr. Robinson insists on the necessity of the purity of the creasote, and has especial confidence in the product of T. Morson & Son, an English firm.

From the last *Annuaire de Therapeutique* we learn that for the past nine years Dr. Sommerbrodt, of Berlin has adminstered creasote to nearly five thousand phthisical patients.

In almost all the patients, this medicament has caused amelioration of the symptoms, those only failing to be benefited in whom the pathological process was far advanced, and had invaded a great number of organs. "In cases relatively recent (initial hæmoptyses, catarrh of the apices, limited infiltrations) creasote gives surprising results; conservation of the forces, diminution of the cough, of the expectoration, increase of appetite, lessening of the night sweats and fever; lastly in many cases disappearance of the physical signs, notably of the purcussion dulness, especially in young subjects." Sommerbrodt gives the creasote in gelatine capsules each cantaining a grain of creasote and four grains of syrup of tolu. Three of these capsules are taken after each meal. The dose is gradually increased as the stomach will bear. Sommerbrodt finds that "the greater the quantity of creasot which the patient can tolerate, the more efficaciou is its action." In some instances he has given a much as forty or forty-five centigrammes dail (seven to nine grains) for months.

We learn from the *Berlin klin. Woch.* the Kartzer has published observations of sixty-or cases of phthisis treated by creasote, giving als the results obtained by the same treatment in hundred other cases. In ten per cent. he has note what he considered complete recovery, the physic

signs disappearing, and bacilli being no longer present in the sputa. In forty per cent. he has obtained amelioration, so that the patients have been able to resume their occupations. His favorite formula is as follows: Beechwood creasote, two grammes; pure alcohol, thirty grammes; tincture of gentian, extract of coffee, of each ten grammes; distilled water, one hundred grammes. Shake, and take a dessert-spoonful three times a day in half a cup of milk.

This mixture, according to Kartzer, is almost invariably well tolerated.—*Boston Med. and Sur. Jour.*

THE MEDICINAL TREATMENT OF MENSTRUAL DISORDERS.

The treatment of symptons alone, without regard to the underlying condition, of which the symptoms are but the expression, is often looked upon as unscientific and unworthy of the consideration of the true physician. It is, indeed, unscientific, and were it possible always to discover and remove the cause it would be equally irrational and unjustifiable. But unfortunately we are unable always to act upon this principle. We cannot always discover the cause, and, knowing or suspecting it, we are often unable to remove it. This is noticeable so in regard to menstrual irregularities, especially as occurring in young women. The general practitioner is often asked to relieve cases of this nature in girls, who would never submit to an examination or operation, preferring rather to suffer pain indefinitely than the shame of a physical investigation into the nature of their trouble. In such cases the physician is forced to try the effect of medicinal agents, groping it may be, in the dark before insisting upon an examination. Such being the case, it is well to learn what remedies have been found to be of occasional service in relieving symptoms of this nature which are not dependent upon actual organic disease.

In a very practical paper, read before the Connecticut Medical Society at its annual meeting in 1888, Dr. Gideon C. Segur, of Hartford, presents a general view of the subject, giving the results of his own experience and quoting the opinions of several prominent gynæcologists whom he has consulted. A brief *résumé* of these opinions is all t it can be presented here, the reader who may ire a more extended presentation of the subject ng referred to the original paper.

memorrhœa.—For this condition most of the horities consulted recommended general tonics, n, arsenic, and cod-liver oil. Permanganate of tassium, which was at one time so strongly ommended, does not seem to be in much favor, objection to it being that it is too irritating to stomach. Manganese was advised by some, this is the remedy that the author has found to give the most satisfactory results. Most of the salts of this drug, however, cause so much gastric irritation that they cannot be used in most cases, but the binoxide seems to be an exception in this respect, Dr. Segur having used it in many cases with the happiest results and without seeing any disagreeable effects caused by it. A disagreeable feature of this remedy, in Dr. Mundé's experience, though apparently not in the author's, was it's unreliability. It might afford relief at one time, and yet at another, even in the same case, and seemingly under the same conditions it would fail utterly to bring on the menstrual flow. The lactate of manganese is also free from the irritating action upon the stomach that most of the other salts of the drug exert. Manganese has the reputation of being an abortifacient, hence some caution is necessary in its use as an emmenagogue. But the maximum dose employed by the author is six grains a day, and this is far below that which has been used to produce abortion.

Dysmenorrhœa.—The opinions of the authorities consulted by the author concerning this symptom and its relief were most varied. Some thought no benefit could be obtained by any but operative measures, while others spoke hopefully of many remedies. Among those which seemed to have given most satisfaction to the writers were pulsatilla in three to five drop doses three times a day; cannabis indica, viburnum, camphor, belladonna, and antipyrine. Dr. Segur found manganese to render good service in these cases also, in many instances. The binoxide was used in doses of six grains per diem. The application of heat, by means of the sitz bath or douche, was a useful adjuvant to the internal medication.

Menorrhagia.—For this condition the most efficient remedies were found to be ergot, hydrastis, digitalis, sulphuric acid, fluid extract of gossypium, and gallic acid.

It is rather strange to find such a want of unanimity in the recommendations of these different authorities concerning the most efficacious medicinal agents for the relief of menstrual disorders. It is rather discouraging, also as the number of remedies vaunted as useful in any particular trouble is generally in inverse proportion to its amenability to treatment. Yet, notwithstanding the discouragements which those who attempt to treat menstrual disorders by drugs often encounter, the physician is many times powerless to treat them in any other way. Dr. Segur has, therefore, rendered good service in collecting the opinions of so many experienced gynecologists, and in giving the results of his own efforts to relieve sufferers of this class, and we hope that the paper will be useful to many who may perhaps be able occasionally to cure some of these disorders by one or other of the remedies mentioned by the author.—*N. Y. Med. Rec.*

MEDICAL NOTES.

Ordinarily, one woman in eight is *sterile;* but in women who have fibroids, one in three is sterile. (Parvin).

In *facial erysipelas*, where you cannot conveniently apply ordinary means, paint the part with a 10 % iodoform collodion. (Prof. Gross).

For a case of *trifacial neuralgia*, Prof. DaCosta ordered five drops of tinct. of gelseminum t. d., increased until double vision results; also a full diet.

In *posterior displacements of the uterus*, always replace the organ before introducing a pessary; the frequent failure of its use is generally due to this cause. (Parvin).

Where there is a collection of foreign matter, as pus, in the *antrum of Highmore*, extract the first molar tooth (or more, if necessary), and drain the cavity in this way. (Sajous).

For *universal eczema* in a child, Dr. Rex ordered bran baths and—

℞—Acid. salicylic, ... gr. xv.
Vaseline, ... f ℥ j.—M.

SIG.—Use locally three times a day.

For *alopecia*, Prof. Bartholow recommends—

℞—Extract. pilocarpi fluid, . . . f ℥ j.
Tinct. cantharidis, ... f ℥ ss.
Liniment. saponis, ... f ℥ ijss. M.

SIG.—Rub into the scalp daily.

The following are the *means of arresting hæmorrhage*, arranged in their order of usefulness: ligature, torsion; acupressure; compression, forced flexion of a limb; styptics; and the actual cautery. (Prof. Gross).

For *specific vaginitis*, Prof. Parvin ordered mucilaginous injections and warm hip baths in the acute stage, followed by injections of 1 to 1,000 corrosive solution and tampons of boracic acid and glycerine.

For *fractures of the forearm* in the middle third or low down, Prof. Forbes uses two straight splints extending beyond the finger ends, thus keeping the fragments from being displaced by movements of the fingers, which is liable to occur if a short splint, like Bond's, is used.

Prof. DaCosta prefers the use of the bismuth *test for sugar* in the urine. Take equal parts of urine and liquor potassæ, add a pinch of bismuth subnitrate, boil thoroughly. If sugar is present, the powder turns brown or black.

For *diabetes mellitus* in a man æt. 44 years, in addition to the usual regulation of diet, Prof. Da Costa directed saccharine as a substitute for sugar to sweeten coffee, etc. Also half a grain of codeia morning and evening.

For *ptyalism*, Prof. Gross advises thirty grains of potassii chloras every four hours, and—

℞—Liquor. plumbi acetat., . . . f ℥ j.
Aquæ destillat., ... f ℥ viij. M.

SIG.—Use as a mouth wash.

Prof. DaCosta recommends for the *sore throat of scarlet fever*—

℞—Thymol, ... gr. iv.
Glycerini,
Aquæ destillatæ, āā . . . f ℥ j.—M.

SIG.—Use as a wash (dilute further, if necessary).

As an external application to *enlarged lymphatic glands* in the neck of children, the following is efficient:—

℞—Potassii iodidi, ... ℥ j.
Vaseline, ... ℥ j. —M.

SIG.—Rub in thoroughly three or four times a day.
(Dr. O. P. Rex).

The following formula is used for the introduction of medication into the uterus or vagina for the prevention of or during *puerperal sepsis*, at the Philadelphia Lying-in Charity Hospital:—

℞—Iodoformi, ... gr. lxxv.
Pulv. acaciæ,
Pulv. amyli,
Glycerini, āā . . . . . gr. xv.
Gelatin., ... gr. iiss. M.

Ft. bolus j.
(Dr. Charles Meigs Wilson).

For a case of *quinsy*, seen in the first twenty-four hours, the treatment is simple. Add one drachm of ammoniated tincture of guaiac to a teaspoonful of milk; gargle and swallow every three hours; after the third or fourth dose the swelling of tonsils subsides and patient is much relieved; most likely he will have a diarrhœa; this is the time to reduce the tincture to one-half drachm. When the case goes thirty-six hours without interference, the treatment is different and difficult. Allow small pieces of ice in the mouth, while internally, twenty grains of bromide of potassium combined with fifteen drops of wine of ergot, or six drops of tincture of belladonna every three hours, although the latter frequently causes headache; if tonsil has a tendency to go to abscess, do not let it rupture spontaneously; find tender spot with finger; take a curved bistoury and open, not cutting deeply (Sajous). — *Coll. and Clin. Record.*

THERAPUETICS OF BRIGHT'S DISEASE.

Classic Regimen:—Climatic precautions consist in avoiding humidity and rapid changes of temperature. In dietetics the patient is told to avoid highly spiced and irritant foods; avoid eggs, wine,

liquors and beer and to confine himself to the milk diet, either absolute or mixed.

Senator's Regimen:—This permits the use of white meats, including pork, starchy and herbaceous foods, fruits, fats and milk. It also allows wine diluted with water. It forbids all red meats.

Semmola's Regimen:—This consists in the observance of the foregoing rules and as an internal remedy its author prescribes the following, to be taken daily:—

℞.—Potassium iodide. . . . grs. xvi.
Sodium phosphate. . . ʒ ss.
Sodium chloride. . . . ʒ iss.
Water. . . . . ℥ ij.
Mix and dissolve.

This amount suffices for twenty-four hours, and is to be taken at convenient intervals.

Bamberger's Regimen:—This prescribes the rigid adherence to the milk diet, and assists it with tonics and iron. Its author recommends the following:—

1. Pills of perchloride of iron after the following formula, from 3 to 6 to be taken during the twenty-four hours:—

℞.—Perchloride of iron. . . . ʒ ss.
Marsh trefoil (menyanthes trif.) in powder. . . . . ℈ iv.
Extract of taraxacum, sufficient.
Mix and divide into 100 pills.

2. Pills of sulphate of iron. For these Bamberger prefers Wiethe's formula as follows:—

℞.—Sulphate of iron. . . . . ℈ iv.
Sodium bicarbonate. . . . . ℈ iv.
Extract of taraxacum, sufficient.

Mix and make into 60 pills, of which 3 are to be taken in the morning and a similar number on going to bed.

3. Infusion of cinchona bark, made by exhausting 300 grains of the contused bark with 6 ounces of boiling water, and sweetening with half an ounce of syrup of orange peel. A tablespoonful of this infusion is to be taken every two hours.—*Rev. Gen. de etc.*

GLANDERS AS AN INFECTIOUS DISEASE.

The following letter, upon the subject of glanders as an infectious disease, and the propriety of k'''ing animals suffering from said disease or farcy, as soon as recognized, is published for the inform tion and guidance of the Army:

BALTIMORE, July 24, 1888.

T the Quartermaster-General U. S. Army, Washington, D.C.

ENERAL,—In reply to your communication of July 16, I ave the honor to submit the following statements and o] nions:

landers is an infectious disease in which the infectious a] it has been demonstrated to be a living micro-organi —a bacillus.

The bacillus of Glanders was discoverod by the German bacteriologists Löffler and Shutz, in 1882, and the discovery has since been confirmed by several other competent bacteriologists. It is found in the nasal secretions and ulcers of the mucous membrane, in the "farcy-buds," pustules and enlarged lymphatic glands of infected animals, and it is probable that it is also sometimes present in the urine.

It is a slender rod, somewhat similar in appearance to the well-known tubercle bacillus, but more uniform in size and somewhat broader. In preparations stained with fuchsin or with Löffler's solution of methyline blue, clear spaces are often seen in the rods, which have been thought by some authors to be spores, but this is doubtful as Löffler has found that no development occurs after the bacilli have been exposed to a temperature of 55° C. (131° F.) for ten minutes.

Pure cultures of this bacillus have been shown to produce typical glanders in horses and asses, and it is recognized by bacteriologists as the cause of the disease. The disease may also be transmitted by inoculation to guinea-pigs and to field-mice, which animals (preferably guinea-pigs) may be used as a test of the infectious character of the nasal secretions of a suspected animal.

Exact experiments have shown that the bacillus of glanders is killed by exposure for five minutes to a five per cent. solution of carbolic acid, or by a 1 to 5,000 solution of corrosive sublimate.

In practice it will be best to rely upon boiling water for the disinfection of all articles which can be immersed in it without injury—rope halters, blankets, curry-combs, bits, etc. To keep on the safe side, half an hour may be fixed as the standard time during which articles to be disinfected shall be immersed in boiling water, or exposed to steam at a temperature of 212° F.

Articles of leather should be repeatedly washed with a 5 per cent. solution of carbolic acid or a 1 to 1,000 solution of corrosive sublimate; or immersed in such a solution for at least one hour. If the solution can be used hot, say 180° F., without injury to the material, this will be desirable.—*Journal of Am. Med. Association.*

USEFUL MEDICAL FORMULÆ.

Arranged by D. P. KENNA, L. K. Q. C. P. I.

Dinner Pill:

℞.—Ext. aloes aquosi,
Gum mastich . . . āā gr. xij.
Pulv. capsici,
Ext. belladonna . . . āā gr. vj.
Pil. colocynth co. . . . . gr. xxx.
M.—F. massa, in pil. xij. div.
Sig.—One pill before dinner. (O'Farrell.)

Purgative Pill:

℞.—Pulv. aloes soc. . . . . gr. ij.
Pulv. ipecac. . . . . gr. ½.
Pil. hydrarg. . . . . gr. j.
Ext. hyoscyami . . . . . gr. ij.
M.—F. pil. j.
Sig.—One or two pills at bed-hour. (Abernethy.)

Cephalic Snuff for Coryza:

℞.—Morphiæ muriat. . . . . gr. ij.
Bismuth. subnit. . . . . ʒ vj.
Pulv. acaciæ . . . . . ʒ ij.
M.—F. pulv. (*Ferrier.*)

Mixture for Pyrosis:

℞.—Bismuth carb. . . . . ʒ ij.
Magnesii carb. levis . . . ʒ j.
Pulv. tragac. ver. . . . . gr. xx.
Aq. flor. aurantii,
Syr. flor. aurantii . . . āā ʒ ij.
Aquam . . . . . ad. ℥ vj.
M.—F. mist.
Sig.—Three or four teaspoonfuls three times daily, after meals. (Squire.)

Habitual Constipation:

℞.—Aloina,
Ext. nucis vom.,
Ferri sulph.,
Pulv. ipecac,
Pulv. myrrha,
Saponis . . . . . āā gr. ½.
M.—F. pil.
Sig.—One pill to be taken half an hour before last meal of the day. (Sir A. Clark.)

Or,

℞.—Ext. cascaræ S. Liq. . . . ʒ ij.
Tr. nucis vom. . . . . ʒ ij.
Glycerini . . . . . ℥ j.
Aquam . . . . . ad. ℥ iv.
M.—F. mist.
Sig.—ʒj. as required.

Carlsbad Salt (substitute for):

℞.—Sodii sulph. . . . . ʒ j.
Sodii chloridi,
Sodii bicarb. . . . . āā ʒ ss.
M.—F. Pulv.
Sig.—Take in half a tumblerful of tepid water.

ALBUMINURIA OF PREGNANCY AND PUERPERAL ECLAMPSIA.—Dr. Lantos, of Buda-Pesth, has recently made a series of observations on albuminuria of pregnancy in the wards of Professor von Kézmársky. In over 18 per cent. of 70 pregnant women he found albumen in the urine, whilst in nearly 60 per cent. of 600 newly delivered women the urine was albuminous. Albuminuria was detected in over 70 per cent. of 268 primiparæ, and over 50 per cent. of 332 multiparæ. The percentage was distinctly lower in premature labour, and 50 per cent. lower in abortion cases. Out of ten cases where albumen was abundant so that Dr. Lantos used the microscope, he found pus in 3 and casts in 5, but no foreign elements in the remainder. He examined the kidney in 39 cases where the patient had neither died from eclampsia nor from nephritis. In 15 of these cases the kidneys were very anæmic, in 21 pale, and only in 3 full of blood. Amongst the local changes in other cases he found acute parenchymatous nephritis in 2 cases, acute hæmorrhagic nephritis in 1 case, parenchymatous degeneration in 9 case, and in 4 albuminous degeneration.

Dr. Lantos therefore concludes that, putting aside all evident and probable cases of nephritis in pregnant women, albuminuria is not rare in pregnancy, and very common after parturition. He refers the phenomenon to reflex irritation of the vasomotor nerves of the renal vessels; it has no pathological significance, and, in conjunction with other symptoms, is a valuable diagnosis sign of pregnancy. Out of 14,815 labours observed in the course of fifteen years, he noted 53 cases (0.36 per cent.) of puerperal eclampsia, a ratio of 278 to 1. Over 78 per cent. out of 42 eclamptic cases occurred in primiparæ, over 21 per cent. in multiparæ; 15 out of the entire 53 died.

Dr. Lantos thinks that the rate of mortality is increased when instruments are used, and as the convulsions often do not cease after delivery, he thinks that the forceps should not be used unless there be strong indications. Convalescence is much prolonged after eclampsia. In 23 of the eclampsia cases the urine was examined; in 21 it was albuminous, casts being found in 4. At the necropsies of fatal cases of convulsion, Dr. Lantos found constant changes in the brain, but only once acute, though frequently chronic, renal changes. Like Osthoff, he traces puerperal eclampsia to violent reflex vasomotor disturbance, and classes it as acute peripheral epilepsy.—*Br. Med. Jour.*

IRRITABLE BLADDER AND FREQUENT MICTURITION IN FEMALES, Alexander Duke—This distressing complaint is commonly met with among female patients suffering from internal disease, and the diagnosis of the cause is sometimes by no means easy. In some cases where, after careful examination, we are able to exclude the urine itself as a source of irritation, and find that the uterine symptoms complained of would not be sufficient by reflex action to account for the continual annoyance, we are obliged to seek for some other cause, and I have remarked in a great number of these cases an unnatural appearance of the meatus urinarius, the opening being much smaller and rounder, reminding one somewhat of the pin-hole os seen in conjunction with conical cervix uteri. This I find is comparatively easily cured by forcible dilatation of the meatus or urethral canal, but I have noticed a rather curious phenomenon to occur during the process, that is, the escape of a considerable quantity of urine when the blades of dilator are freely opened (and this after the bladder had been but a few moments before fully emptied to all appearance by the catheter), the amount of urine escaping being fully equal in some cases to that previously removed. It has always been a puzzle to me where this urine came from, as the diagnosis of cystocele is a comparatively easy one, and a sacculated condition of the bladder could not possibly exist in all the cases in which I have noticed this peculiarity. We all know that when there is a

tendency to prolapse of the uterus, and the vaginal walls in a lax condition, cystocele is most likely to occur, the posterior wall of the bladder losing its necessary support, and so bulging backwards into vagina and forming a sac sufficient to hold a considerable quantity of urine, but it is in those cases where this factor has been carefully excluded by previous examination that I am at a loss to explain the cause of the peculiarity alluded to. Dilatation of the urethral canal I find the most useful treatment in all cases when the urine is normal, and spasm and irritability is complained of, but where there is a manifest want of tone in the bladder a mixture containing tr. ferri muriati, cantharides, and nux vomica has always given me satisfactory results. A blister over sacrum I seldom employ, but have found it useful in exceptional cases. The galvanic battery I use as a *dernier ressort*, and have had most satisfactory results in some apparently hopeless cases, one lady patient having worn a urinal for more than five years night and day previous to my seeing her.—*Med. Press.*

THE THERAPEUTIC USES OF HYPNOTISM.—Herter adopts Lieboldt's classification of trance in six divisions, preferring it to the arrangement of Charcot. The proper method of producing hypnosis, advocated by Lieboldt and Bernheim, consists in first securing the confidence of the patient, and then telling him to look the operator steadily in the eye and to think of nothing but going to sleep. The process may be materially aided by suggestive remarks addressed to the patient, and by placing two fingers upon the face; the fingers being pressed gently upon the eyelids. Men and women are about equally susceptible to hypnotism. Although so much has been written on its use in hysteria, the indications for employing it are far from clear. It may be of service in some forms, but recovery, if secured, is not permanent. Hysterical paralyses, especially abductor paralysis of the larynx, hysterical amblyopia and amaurosis, and hysterical convulsions are often decidedly benefited. One need never be discouraged by the first trial to secure hypnosis in a case of hysteria. Not much is to be hoped from it in hystero-epilepsy. The improvement in chorea is often rapid and marked, especially when the movements are general; a number of daily sittings, continued for months, being usu-y required. In insanity the results are not sat-actory. In delirium tremens the effect is often ellent, and the method finds a hopeful field in treatment of the alcohol habit. In masturba-n it has been used with success; and in incon-ence of urine in children it has, in the hands of boldt, been employed with a large percentage cures. Herter doubts whether it is of any real antage in joint affections, though good can be ected in recent neuralgia, and he has succeeded tting short or mitigating the attacks in certain instances of migraine. The occurrence and duration of menstruation have been influenced by it in a few cases. It is not to be recommended in surgery as a substitute for the ordinary anæsthetics, except in cases in which the latter are contra-indicated. In insomnia it can often be employed with good results, gradually substituting it for drugs. As regards the use of hypnotism in parturition, the author concludes that it induces sleep, and is in no way prejudicial to the uterine contractions; that it has no tendency to produce post-partum hæmorrhage or any other bad result; that it is in no way comparable to chloroform in labor, and should only be used in the rare cases in which the usual anæsthetics are contra-indicated.

The bad results following it, and which have been urged against it, can for the most part be entirely antagonized by suggestion. He proposes, as a general rule, that no one should be hypnotized without first obtaining his or her formal consent, and that the operation should always be done in the presence of a third person. No suggestions should ever be given, except those necessary for the patient's improvement in health.—*Boston Med. and Surg. Jour.*

THE MORTALITY OF PNEUMONIA.—Dr. William Osler (*Univ. Med. Mag.*) points out that hospital statistics do not warrant the assertion that there has been any marked increase in the mortality from pneumonia of late years, as asserted by some, although the census returns of the United States favor the latter statement. But, as Dr. Billings points out, the comparison with preceding years is inaccurate, since the data were very imperfect and unreliable. At the Pennsylvania Hospital, with a total of 704 cases since 1845, the mortality has been 29.1, a rate sometimes much exceeded, as in 1875 to 1877, when it was 36.2, and sometimes quite as much lessened, as in 1845-47, when it was only 16 per cent. In the Boston City Hospital for thirteen years the mortality was also 29.1 per cent. Dr. Osler shows that in private practice the rate is lower than in hospitals, and points out that the increase of pauper populations in large cities is doubtless responsible in some measure for this diversity. Dr. Hartshorne's statement, that the "mortality of pneumonia to-day is, under similar circumstances, more than twice as great as it was forty years ago," is not thus borne out; and Dr. Osler shows that in many cases pneumonia is absolutely uninfluenced by treatment. Yet those cases which do call for treatment are precisely those in which our methods are most futile. Post-mortem records show how seldom a simple pneumonia, apart from chronic disease of other organs, is a cause of death, but Dr. Osler thinks that it may be useful to divide the fatal cases into three groups: "1. Those in which the death has resulted from such complications as gangrene, men-

ingitis, and ulcerative endocarditis—conditions at present beyond our art to remedy. 2. Cases in which death has resulted from mechanical causes — over-distension and paralysis of the right heart. 3. The large group in which death has been due to failure of the general powers under the influence of the high fever, or of the specific poison, or of both combined." He has often asked himself why death occurred in some cases, and had been struck with the distended right heart and systemic veins in the young vigorous subjects that sometimes succumb. This seemed to indicate that the heart had failed in over-distension, and he was determined "not to let such cases die without a copious venesection." For ten years he has practised free bleeding (twenty to twenty-five ounces) in adults, and has seen but one case recover out of twelve or fifteen. The cases of bleeding in the late stage were uniformly fatal, as if the conditions present in pneumonia are something more than mechanical.—*Lancet.*

CURABILITY OF CIRRHOSIS OF THE LIVER.—Dr. Millard, at a late meeting of the Société Médicale des Hopitaux, of Paris, presented three patients from his private practice, in whom, after a lengthy treatment for this affection, he had been able to effect a cure.

The first was a man, fifty-five years of age, who drank regularly from four to five bottles of wine daily. Suffering from dyspepsia for several years, he, in July, 1886, began to emaciate; the supervening ascites necessitated six tappings, from which over two hundred pints of fluid were removed. Since the month of November, 1886, the patient has been put upon an exclusive milk diet, with the administration of an infusion of juniper, and drastic purgatives twice a week. At the end of four months the improvement was already well-marked. The second patient, who partook of four pints of white wine daily, had been under the author's care for one year only. The treatment was the same as in the first case; improvement showing itself more rapidly; the patient continues in excellent health. The third patient underwent the same treatment, with greater and more marked improvement than in either of the foregoing cases.

At present the three patients seem apparently quite cured, the only remaining sign of their trouble being a slight hypertrophy of the liver.

The formula of the juniper infusion is as follows:

R.—Juniper berries, ... ℥ ijss.
Infused in water, . . . ℥ vjss.

Then add

Acetate of potassium, } . āā grs. xxx.
Nitrate of potassiunm, }
Oxymel of squill, ... ℥ ijss-℥ j.
Syrup of five roots, . . . ℥ j.

The author further remarked, that he never hesitated to have recourse to tapping, whenever diuresis seemed insufficient. The only food allowed was milk; alcohol in all forms was strictly withheld. The infusion of juniper is not disagreeable to the taste. The author administered it whenever an increased urinary secretion was called for. The patients took it readily, one of them having taken it daily for eight months.—*Revue de Thérapeutique.—Med. News.*

MEDICAL TREATMENT OF FIBROID TUMORS OF THE UTERUS.—The continuous use of ergot internally in twenty or thirty drop doses, three times daily, will accomplish more in the end than the hypodermic method. With this may be alternated a pill composed as follows:—

R.—Ergotine, ... ℥ ij.
Strychninæ, ... gr. j.
Quiniæ salicylat., ... ℥ iss.
Acidi arseniosi, ... gr. j.
M. ft. Massa et div. in pil. No. xxx.

One of these should be taken thrice daily in combination with a tablespoonful of the following:—

R.—Ext. fl. hydrastis Canad., . . ℥ ss.
Aquæ cinnam., ... ℥ v.
Ext. fl. phytolaccæ decand., . . ℥ ss.
Sodæ bicarb., ... ℥ ij.
M.

These remedies in this particular combination are useful in retarding and diminishing the growth of fibroid tumors of the uterus.

The hydrastis and phytolacca both possess properties which give them power to retard abnormal uterine action and promote absorption. But I am persuaded that there are other therapeutic agents which, acting on the blood formation and through the circulation, influence the process of nutrition, rectifying that important function, when deranged, in a remarkable manner and in that way correcting those excesses of local action which produce local disease and abnormal growths. Some years since, with a view of carrying into practice this idea, I began a series of experiments for the purpose of testing the influence on the progress and development of fibrous tumors, by acting on the nutritive functions by means of those preparations containing phosphorus, lime and soda. I had at that time four cases of fibroid under my care. I selected to be used in these cases the syrup of the lacto-phosphate of lime and the syrup of the hypophosphites of lime and soda, as prepared by McArthur. That was about eight or nine years ago. Since that time I have had nine cases under my care. Six of these cases have remained under my inspection, and with one exception are so decidedly improved as to need no further treatment. The one exception came under

my care during the spring, and is now improving under treatment. Three of these cases alluded to have left my vicinity and migrated to a distance. In these cases the syrup of the lacto-phosphate of lime and the syrup of the hypophosphites were administered in teaspoonful doses each three times a day continuously for months, and with slight intervals, so as to give rest to the stomach, for years, that there might be maintained on the system a permanent influence.

The character of most of the cases subjected to this treatment was of the most aggravated form, and had previously been treated by means of ergot internally and hypodermically, the bromides, etc., without in any way retarding their progress.—*Gaillard's Med. Jour.*

Obstetrical Don'ts.—1. Don't begin the administration of an anæsthetic early in labor; it predisposes to post-partum hæmorrhage.

2. Don't use an anæsthetic against the will of the patient or friends.

3. Don't object to the moderate use of an anæsthetic during the latter stage of labor, as it is almost wholly without danger.

4. Don't put the woman entirely under the influence of the anæsthetic, unless you intend some operation.

5. Don't immediately cut and tie the umbilical cord; the child may lose a good deal of blood by so doing.

6. Don't make a strenuous effort to take the placenta away at once, not until the uterus has begun to contract.

7. Don't make forcible traction on the umbilical cord.

8. Don't permit the placenta to remain more than an hour.

9. Don't withdraw the hand from the uterus in taking away the placenta until the walls have begun to contract.

10. Don't forget to examine the perineum after labor.

11. Don't neglect to keep the hand on the fundus uteri for several minutes after delivery, and press down.

12. Don't permit the woman to be left alone for the first hour at least. Danger of post-partum hæmorrhage.

13. Don't leave without giving instructions to ply the child to the breast an hour or two after or.

. Don't refuse to place a binder upon a woman; andage when properly applied is a benefit.

5. Don't let the nurse tend to the child until e mother has been cared for.

6. Don't permit the nurse to wash the baby til it has been smeared with oil of some kind.

7. Don't put undue pressure on the child's head mold it into symmetrical shape, when it has been flattened somewhat from the labor, as it will return generally to nearly its natural shape.

18. Don't allow the nurse to press out the secretion of the breasts for a new-born infant.—*Med. Advance.*

The New Antipyretic, "Pyrodin": A Warning.—Under this name a new drug has been introduced, which has undoubted temperature-reducing properties of a high order, the practical application of which, however, is much interfered with by its toxic action. Pyrodin contains as its active agent acetyl-phenylhydrazin ($C_6H_5N_2H_1C_2H_3O$) a crystalline powder very sparingly soluble in water. According to the clinical and experimental observations of Dr. Dreschfeld, of Manchester, which have been confirmed by M. Lépine, of Lyons, pyrodin acts in the same manner as, but more powerfully than, antipyrin, antifebrin, and phenacetin; and it has also been used effectively in migraine and other forms of neuralgia, as in the lancinating pain occurring in locomotor ataxy (Lépine). Great caution, however, is required in its administration, as it is apt to produce jaundice, followed by anæmia and even more serious symptoms due to hæmoglobinæmia. Milder toxic symptoms have occasionally followed the administration of acetanilid or antifebrin, and also of phenacetin; but, as phenylhadrazin is a much more powerful poison than anilin, so also are the toxic properties of its acetyl compound much greater than those of acetanilid. In face of the poisonous qualities of pyrodin, we must warn the profession against the use of this drug generally. In exceptional cases, and where other antipyretics have failed, it may be useful, but great caution should be used. Small doses only should be given, and at sufficiently long intervals to enable one to watch any toxic effects, with the first appearances of which the drug should be stopped.—*Br. Med. Jour.*

Electric Stimulation in Hysteria.—M. Didier recently read a paper before the National Society of Medicine of Lyons on this subject. The following were his conclusions: 1. Electric stimulation is decidedly the best treatment for hysteria hitherto discovered. It checked the attacks in every case of convulsive hysteria in which it was employed, and in two cases of hystero-epilepsy, though in the latter affection its effects are less certain. It is superior to compression of the ovary, as this treatment may cause pelvic mischief, and cannot be safely employed in pregnancy. 2. Electric stimulation enables the practitioner immediately to distinguish an epileptic from a hysterical patient—whether the hysteria be epileptiform or of convulsive character—being useless in the former case and of infallible effect in the latter. 3. In patients suffering from two different neuroses, this method will serve to distinguish

hysterical from the epileptiform symptoms. 4. An electric current of moderate intensity is applied along the track of the aura; that is to say, the electrodes are applied to the epigastium and to the front part of the neck, when the treatment is applied at the beginning of the attack. When it is resorted to only during the clonic or tonic period, one electrode is applied to the neck and the other is placed in one hand, or the electrodes are placed each in one hand. 5. Besides checking the hysterical attacks, electric stimulation has a curative effect on the neurosis.—*Brit. Med. Jour.*

IS THE TASTE IN THE MOUTH?—Is it not a little singular that physicians will persist in speaking of the taste in the mouth? A patient was asked the other day if she had a bitter taste in her mouth in the morning. She naively replied that when she had a bitter taste it was always in her mouth. That is the only end of the alimentary tract that we know of in which the sense of taste resides.—*Medical Age.*

If our contemporary will be so particular, we may perhaps venture to remind him that, if one comes down to a minute analysis, the taste is not in the mouth in reality at all, but is in the gray matter of the uncinate gyrus. The idea that the taste is in the mouth is simply due to the eccentric projection of the secretion according to the known laws of physio-psychology. We trust that he will make proper explanations to the lady.—*Med. Rec.*

RESORCIN IN THE TREATMEMT OF KELOID.—Dr. Justus Andeer, writing in *Der Fortschritt* of Oct. 10, 1888, reports the case of a woman who was incapacitated for work on account of a large keloid on the right foot. A one-per cent. ointment of resorcin was applied, and in a short time all the painful symptoms disappeared, and the patient expressed herself as cured. Von Nussbaum has also recommended resorcin as a very efficient remedy for keloid. As the disease is usually regarded as practically incurable, a trial of resorcin would seem to recommend itself as worthy of being made. It is advisable to begin with a weak ointment and gradually to increase the strength according to the indications.—*Med. Rec.*

REAGENT FOR TESTING FOR SUGAR IN THE URINE.—Prof. Almén, of Upsal, has proposed the following test which does not change, and which gives better results than Trommer's:

Caustic soda	8	parts.
Water	100	"
Tartrate of soda	4	"
Sublimate of Bismuth	2	"

Test the urine first for albumen by means of heat and nitric acid; filter; then employ one part of the above solution to ten parts of urine. This will detect five per cent. of sugar.—*Jour. de Méd.*

TREATMENT OF RHEUMATISM.—Peabody treats his cases of acute rheumatism with the following combination of salicylic acid and iron:

R. Acid, Salicylic	20	grains.
Ferri Pyrophosphatis	4	grains.
Sodii Phosphatis	1	grain.
Aque	½	ounce.

M. Sig.: The dose, which is described in this formula, is given every two hours.—*Med. Breif.*

FOR DIABETES.—M. Constantine Paul recommends the following mixture for those who demand the sweet flavor and are prohibited sugar. A teaspoonful contains twenty-five centigrammes of saccharin, sufficient to sweeten a glass of water:

R.—Saccharin,	6	parts.
Sodii bicarb.,	4	"
Alcohol (40 per cent.)	100	"
Ol. menth.,	gtt. xx.—M.	

—*Am. Jour. of Pharm.*

ETHER FOR PEDICULI PUBIS.—In the *Monat. prak. Derm.* it is proposed to destroy pediculi pubis by a single application of ether in spray. This procedure is less injurious to the skin than the application of chloroform, which likewise accomplishes the same object.

THE annual statement of the Mutual Life Insurance Company of New York shows the remarkable progress made by this institution during twelve months. The record made by the Mutual eclipses its own best efforts, and naturally exceeds that of any other financial institution in the world. The new business written amounted to $103,214,261.31, an increase of $33,756,792.95 over the new risks assumed in 1887, and a gain of $46,381,542 over the business of 1886—showing a continuous and phenomenal advance. The assets of the Mutual Life now aggregate $128,082,153.56, indicating a gain for the year of $7,275,301. The Company has now an outstanding insurance account amounting to $485,125,184. Its total income from all sources is reported at $26,215,932. It paid to its members during the year for death claims and endowments and other obligations $14,727,550.22. Up to date the Mutual had 158,369 policies in force, showing a gain in membership for the year of 17,426, thus forming the biggest army of policy-holders in any regular Life Insurance Company in the world. The surplus fund was increased $1,645,622.11 in 1888 and the Mutual now has $7,940,063.33 over and above every liability.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address,* DR. J. L. DAVISON, 12 Charles St., Toronto.

☞ *Advertisements inserted on the most liberal terms. All Letters and Remittances to be addressed to* DR. C. SHEARD, 320 Jarvis St., Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MARHAR, 23 Rue Richer, Paris.

TORONTO, APRIL, 1889.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

THE ANATOMY ACT.

All the Medical Colleges in Ontario, aided by the sympathy of the whole medical profession of the Province, were much interested in the passing of the recent amendments to the Anatomy Act. The Medical Council and our Medical Colleges, are very properly, most anxious, while extending from time to time the curriculum of medical studies, to give students every reasonable facility to bring themselves up to the high standard now required. Hence the necessity which exists for increasing the supply of anatomical material obtainable by law, without forcing students to get, *as best they can*, what they absolutely require, in order to pursue their studies to any advantage. The amendments sought for, embraced the unclaimed bodies of persons having no relatives, who have died in our insane asylums, hospitals, houses of industry and other refuges aided by public grants. To have granted this fully, and with readiness, would have been the very least our Ontario Legislature should have done in aid of a profession like ours, e members of which, have necessarily committed them, the care at one time or another, of every an, woman and child of the population. But e experience of past efforts in the same direction ·q repeated this year. Some of the members of Legislative Assembly, without distinction of ty, did as they always have done,—set them·es steadfastly against meeting the reasonable demands of the profession and the Medical Colleges, and left nothing undone which they could do, to make the amendments obtained as meagre and unsatisfactory as was in their power. For example, under the absurd idea that the minds of persons, who have been in many cases hopelessly insane and as mindless as oysters for a long term of years, might be affected unfavorably by the idea of their bodies being used for the advancement of science before being buried,—was made a reason for excluding asylums for the insane from the institutions included in the amendments sought for.

How such persons can ever be supposed to bother their heads about what is to befall their bodies after death, whether they are to rot in the grave as usual, or be first made tributary to science, has never been satisfactorily explained, and cannot be. It is true that some of the medical superintendents of asylums themselves have a fad of this kind, and bring it forward periodically, as often as the Medical Colleges ask for what they are justly entitled to in this direction; a fad, however, to which no attention should be paid.

It was also desired to have the bodies of those who had died in public institutions claimable only by *relations;* for heretofore, the permission given to "*bona fide* friends" to claim them, has been sadly abused—50 or 60 per cent. of these bodies being sometimes claimed by friends of a bogus kind, *e. g.*, by fellow-members of societies to which the deceased might have belonged, and often only by fellow-countrymen; or by any one indeed, even a hospital nurse, who could collect in small sums the necessary $5 from any source.

On this account the words "*bona fide* friends" were left out by the framers of the amendments. This provoked vigorous opposition. All sorts of imaginary cases were spoken of by garrulous legislators as likely to occur, and finally they were re-inserted, and a provision added by way of guarding against "bogus" claimants, viz., that the order of a police magistrate, who is to be satisfied that the party claiming the body is a "*bona fide* friend," will have to be procured, in addition to paying the $5. This, of course, will, to some extent, decrease the evil which formerly existed and enlarge the supply available for Medical Colleges; but to have given the promoters of the amendments what they asked for, would have done no harm, as

no "*bona fide* friend" has ever been or would ever have been refused, by any College, the body he might claim, and on this very account the Colleges have to keep them a long time intact in order to give every opportunity for just claims to be made. It is to be hoped the police magistrates, in doing the duty the Bill assigns them, will show more intelligence than many members of the Legislature did. If so, the interests of Medical Science may, even with the scant concession given, gain considerably.

The members of the profession can hardly imagine the gross ignorance, and intense prejudices of some of the parties who have the honor of writing M.P.P. after their names. Imagine one of these gentlemen gravely suggesting that he did not see why medical students might not study anatomy from "manikins"—*ex pede Herculem*.

Another anomaly in connection with this Bill was the authorities of a *hospital*, in a town some distance from Toronto, petitioning and protesting loudly against its passing. What sort of medical attendants would that, or any other hospital, be able to secure, if the study of anatomy were hampered and largely prevented by such petitioners? The opposition to such Bills is based on two grounds: most unjustifiable ignorance, and strong prejudice. We hope that the Bill may give such help as the Colleges and the profession require in the study of anatomy; but if its provisions be found so inadequate that other plans, which no one approves of, have to be resorted to, to eke out the supply of what *must be had if we are to have properly educated physicians and surgeons*, and which the Legislature cheerfully and fully has provided for, in Great Britain and even in Quebec, it is neither the Colleges nor the profession, but our insufficiently enlightened Legislature which will have to bear the blame.

OVER-WORKING OF SCHOOL CHILDREN.

In the course of a chat a few evenings ago with a gentleman engaged in the educational work of this Province, he remarked: "I worked seven hours yesterday preparing a lecture, but I find it was too much; a man should not work more than three or four hours at anything which taxes the brain to its utmost." I wondered at the time how many children of tender years pass under his observation during a twelvemonth of his professional duties, who can get off with, say, three or four hours a day of mental work, under our present system of educational forcing. We know from a somewhat extended experience as to the methods of teaching in vogue in some of our most successful schools, that the pupils attending them are sadly over-worked. Five hours a day are spent in the school rooms proper and then comes the ever-dreaded "home-work." A lady consulted us the other day regarding the health of her daughter, a girl of about fourteen years of age. The symptoms need not be here set down, as they are of a kind with which every medical man is more or less familiar, but, instead, let me set down simply the work of that girl for twenty-four hours. She rises at 6:30, practises at the piano for an hour, has breakfast and gets to school at nine. Here for five hours she is actively engaged in class-work, and I know from the *esprit de corps* of that school, that there is little opportunity for the unbending of the bow during these five hours. In the evening it is usually ten o'clock before her "home work" is done. Is it at all to be wondered at that she is languid and restless, always tired, has no appetite, etc.? This is not an unusual case. Of course many children are so constituted that they let home work go and take their chances next day, and do not wear themselves out even during school hours by a too close attention to the work of the classes; but the more conscientious and fine-grained a boy or girl is the more will their burdens be increased And it is generally true that the extremely sensitive child, who dreads a bad mark for an imperfect recitation, or a frown from the teacher for inattention, is usually the one whose physical strength will least enable him to bear up under this constant mental strain.

Now, the teacher cannot be blamed for endeavoring to force his pupils, when that incubus, the examination is constantly kept before him. Let his class fail to come up to the standard of *deadly uniformity* required by our examining boards, and he is graded as inefficient. These examining boards, acting of course under the regulations of the Education Department, are the bane of the intelligent teacher's life. They have been well described by a caustic writer as: "Knots of clever, eager, trained experts in the examining art, who are marking, questioning, classing and certifying right and left on a technical, narrow, mechanical method. They would be far better employed in

learning something useful themselves." Under the present system of examinations everything is reduced to a routine, no individuality in teaching can obtain, nor can the fitness of a pupil for one thing more than another be recognized, to an extent at all commensurate with the difference in the nature of children, let alone having regard to their probable walk in life. A gentleman cannot be made by Act of Parliament, nor can a scholar, in the true sense of the term, be developed by any such routine course of teaching as is now required to make pupils "pass" the examinations which are eternally looming up before them, and the results of which, as before stated, are looked upon as determining the teacher's status in his profession, all the facts and all the Gradgrinds in creation notwithstanding.

ONTARIO MEDICAL ASSOCIATION.

As will be seen by the advertisement in another column, Wednesday and Thursday, the 5th and 6th of June, have been fixed upon as the dates of the ninth annual meeting of this Society. This meeting promises to be one of more than ordinary interest. Already many valuable papers have been promised, and the special committees have been hard at work for several months.

Dr. Roswell Parke, of Buffalo, will read a paper upon "The radical cure of hernia." Interesting papers are expected from Dr. Skene, of Brooklyn, and Dr. Andrew Roberston, of New York. Among others who have signified their intention of being present and reading papers, are Dr. Howitt, of Guelph, Drs. Buller and Ross, of Montreal; Drs. McFarlane, Graham and Ryerson, of Toronto, and Dr. James Grant, of Ottawa.

The special committees are composed as follows:

Medicine.—Dr. Sheard, Toronto, Chairman. Dr. McPhedran, Toronto; Dr. Moorhouse, London; Dr. Tye, Chatham, and Dr. Bruce Smith, Seaforth. The subject selected for discussion is "The prognostic significance of moderate cardiac hypertrophy."

Surgery.—Dr. W. T. Aikins, Toronto, Chairman. J. H. Cameron, Toronto; Dr. Malloch, Hamilton; Ruttan, Napanee, and Dr. Dupuis, Kingston. Subt: "The general management of the patient and k room in surgical cases."

Obstetrics and Gynæcology.—Dr. Griffin, Hamilton, airman. Dr. Barrick, Toronto; Dr. Fenwick, ingston; Dr. Adam Wright, Toronto, and Dr. witt, Guelph. Subject: "Some observations on erations of the perinæum."

Ophthalmology.—Dr. Moore, Brockville, Chairman. Drs. Reeve, Burnham, Palmer and Ryerson, Toronto, and Dr. Connell, Kingston. Subject: "Glaucoma."

Therapeutics.—Dr. Thorburn, Toronto, Chairman. Dr. Oliver, Kingston; Dr. J. L. Davison, Toronto; Dr. Meek, London, and Dr. Wishart, Toronto.

The officers of the Association for 1889 are as follows:—

President.—Dr. W. H. Henderson. Kingston.

Vice-Presidents.—Dr. Geikie, Toronto; Dr. Howitt, Guelph; Dr. Day, Trenton, and Dr. Aikman, Collingwood.

Corresponding Secretaries.—Dr. Lovitt, Ayr; Dr. Gillies, Teeswater; Dr. Trimble, Queenston, and Dr. Leonard, Napanee.

General Secretary.—Dr. D. J. Gibb Wishart, Toronto.

Treasurer.—Dr. N. A. Powell, Toronto.

The committees other than the above will be composed as follows:—

Committee on Papers and Business.—Dr. Graham, Toronto, Chairman. Dr. Mullin, Hamilton; Dr. Powell, Toronto; Dr. Groves, Fergus, and Dr. A. A. Macdonald, Toronto.

Committee on Credentials.—Dr. A. Davidson, Toronto, Chairman. Drs. R. A. Pyne, W. H. B. Aikins, Armstrong, Britton, Duncan, Barrick, Elliott and Carveth, Toronto, and Dr. Arnot, London.

Committee on Nominations.—Dr. McKay, Woodstock, Chairman. Dr. Brown, Galt; Dr. Holmes, Chatham; Dr. Mullin, Hamilton; Dr. A. H. Wright, Toronto; Dr. R. W. B. Smith, Seaforth; Dr. Aylesworth, Collingwood; Dr. Yeomans, Mount Forest; Dr. Powell, Toronto; Dr. Harrison, Selkirk; Dr. McPhedran, Toronto; Dr. Eccles, London; Dr. Mitchell, Enniskillen; Dr. Fenwick, Kingston; Dr. Moore, Brockville, and Dr. Taylor, Goderich.

Committee on Public Health.—Dr. Shaw, Orillia, Chairman. Dr. Mearns, Petrolia; Dr. Meek, London; Dr. Wilson, Richmond Hill; Dr. Howitt, Guelph; Dr. Carmichael, Mount Forest; Dr. Bryce, Toronto; Dr. Shaw, Hamilton; Dr. T. S. Covernton, Toronto, and Dr. Worthington, Clinton.

Committee on Legislation.—Dr. Strange, Toronto, Chairman. Drs. C. W. Covernton, J. H. Cameron, Miller and Cleland, Toronto; Hon. M. Sullivan, Kingston; Dr. Kitchen, St. George; Dr. Lundy, Galt; Dr. Herod, Guelph; Dr. Millar, Hamilton; Dr. Colver, Waterford; Dr. Cochran, Omemee; Dr. Forest, Mount Albert; Dr. Whiteman, Shakespeare; Dr. Griffin, Brantford, and Dr. Irving, Kirkton.

Committee on Publication.—Dr. Anderson, Milgrove, Chairman. Dr. Caldwell, Lakefield; Dr. McAlpine, Lindsay; Dr. McLay, Algoma; Dr. Philp, Hamilton; Dr. Winskill, Brantford; Drs. Peters, J. L. Davison and Ferguson, Toronto; Dr. Stalker, Ridgetown, and Dr. Powell, Toronto.

Committee on By-Laws.—Dr. Rosebrugh, Toronto, Chairman. Drs. Cotton, Coatsworth, Doolittle, E. C. King, Ghent, Gullen, W. B. Geikie and Bingham, Toronto; Dr. Cruickshank, Ellesmere; Dr. Freel, Stouffville; Dr. Burgess, Lealieville; Dr. Maguire, Guelph; Dr. Macdonell, Orillia, and Dr. Ames, Brigden.

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Committee on Ethics.—Dr. Atherton, Toronto, Chairman. Drs. Barrick, Baines, McCullough, O'Reilly, Strathy, Sweetnam, Smith and Spencer, Toronto; Dr. Sturgeon, Hagersville; Dr. Maguire, Brantford; Dr. Gavillar, Grand Valley; Dr. Mitchell, Enniskillen; Dr. Sheard, Toronto, and Dr. Digby, Brantford.

Committee to form a Code of Ethics.—This committee is the same as above, with the addition of Drs. Burnham and Wishart, Toronto.

Committee on Coroners' Inquests.—Dr. J. H. Richardson, Toronto, Chairman. Dr. Irwin, Kingston; Dr. Johnson, Toronto; Dr. Philp, Hamilton; Drs. C. W. Covernton, J. E. White, Duncan, J. H. Cameron and Powell, Toronto.

Committee on Audit. — Dr. Kitchen, St. George, Chairman. Dr. Gullen, Toronto; Dr. Hillary, Aurora; Dr. Lundy, Preston; Dr. Millar, Toronto; Dr. McKinnon, Guelph; Dr. A. J. Johnson, Toronto; Dr. Sinclair, St. Marys; Dr. Yeomans, Mount Forest; Dr. Machell, Owen Sound; Dr. Phillip, Brantford; Dr. McDonagh, Toronto; Dr. Macallum, London, and Dr. Millman, Kingston.

Committee on Necrology. — Dr. W. H. B. Aikins, Chairman. Dr. J. A. Watson, Toronto; Dr. Whiteman, Shakespeare; Dr. Logie, London; Dr. Taylor, Goderich; Dr. Smith, Toronto; Dr. Walker, Dundas; Dr. Grant, Beaverton; Dr. Roe, Georgetown; Dr. J. Caven, Toronto; Dr. Lindsay, Strathroy; Dr. Hunt, Clarksburg, and Dr. Eakins, Belleville.

Committee on Arrangements.—Dr. P. H. Bryce, Toronto, Chairman. Drs. Grasett, Temple, Spencer, Simpson, R. A. Pyne, O'Reilly, Acheson, Macfarlane, Machell, Ferguson, Davidson, Burritt, Grafton, Thistle and Cunningham, Toronto.

THE BELLY BAND FOR THE NEW BORN.

The abdominal pad, as used in obstetrics, having received the condemnation of the great majority of the profession, as being not only useless to prevent post partum hemorrhage, but absolutely harmful; and the obstetric binder being looked upon as valueless except as a comfortable support to the mother's relaxed abdominal walls; we are quite prepared for innovations in the management of the new born child. Hitherto the old women's notions regarding this latter have been allowed to go almost unchallenged, but the iconoclastic spirit of modern scientific obstetrics is becoming evident even here, and this last entrenchment of mediæval obstetrical science is being forced. No doubt the poor helpless babe is tortured beyond what we can conceive, by a system of treatment which in a great many cases is as irrational as it is harmful, yet little has been said or done to remedy the evils of which we speak. In this connection, the following by Dr. Ady, in the *Pacific Med. and Surg. Jour.* will be of interest:—He says "he believes the 'belly-band,' however made, is a relic of barbarism — uncomfortable and mischievous, often causing and never preventing hernia. The inguinal region is the weakest part of the abdomen. Instead of protecting this, the band, on the contrary, forces the intestines down into it. Even if the umbilical opening has not properly closed, the pressure of the band about the circumference of the body will only crowd a knuckle of intestines into the aperture and effectually keep it open, instead of allowing it to close, which it will generally do if left to itself. He would, therefore, advise that all bands, skirts, etc., that punish the baby, be left off."

NOTES AND OBSERVATIONS

FROM NEW YORK HOSPITALS AND SOCIETIES.

Prof. Loomis, in a recent clinic on cardiac diseases, offered the following suggestions as a result of his long and extensive experience:—In the prognosis of cardiac diseases, too much stress has been laid on the existence or non-existence of a cardiac murmur and the character of it. The general tendency is to give an unfavorable prognosis whenever a murmur is found. As a matter of fact the murmur is of little importance, it is the condition of the cardiac walls that influences the prognosis. If, accompanying the murmur, there is compensatory hypertrophy, the prognosis is good; if there is no hypertrophy or dilatation, the prognosis is good; but if there exists dilatation and degeneration of the cardiac wall, and symptoms of impeded circulation, then we have just reason to render an unfavorable prognosis; and the one fact to be considered in all forms of chronic endocarditis is the condition of the cardiac walls. He has seen many a patient over 70 years of age with well-marked cardiac murmurs, but who complained of no symptoms referable to the heart whatever. In presenting a case of ulcerative endocarditis, he concisely stated the present views of the etiology as follows: Until quite recently most observers and experimenters held the view tha there was a specific bacteria which, when intr

duced into the system, would give rise to ulcerative endocarditis, just in the same way that the tubercle bacillus would cause phthisis. The experiments of Prudden, of New York, have conclusively shown that in order to produce ulcerative endocarditis the valves must have been the seat of some traumatism, as a previous endocarditis or direct mechanical injury. In the majority of animals in which the bacteria were introduced, the results were *nil*, but when the valves were pricked with a needle or had been the seat of a previous simple endocarditis, ulcerative endocarditis was invariably produced. It has been proved that there is no specific bacteria for ulcerative endocarditis, but any member of the septic class will cause it. He also stated that he believed that we were on the eve of a radical change in the modern views of bacteriology, as recently a bacillus had been discovered which would give rise to phthisis just as surely as Koch's tubercle bacillus, and which was in every particular entirely distinct from it.

For the relief of distressing vomiting, which occurs in all forms of gastritis, Prof. Janneway highly recommends 5 minims of a 4 % solution of cocaine, given in half a glass of cold water every four hours. In this manner the whole surface of the gastric mucous membrane is rendered anæsthetic, and its effects are sometimes magical.

For the relief of all forms of sudden and intense dyspnœa, Prof. Smith states that no plan in his hands has yielded such satisfactory results as the hypodermic use of atropia and morphia. He gives immediately $\frac{1}{60}$ gr. atropia and $\frac{1}{4}$ gr. morphia, and if this does not relieve it, he repeats the dose very shortly. In many cases the result is almost magical, and the patient, who was obliged to sit up and gasp for air, is enabled to lie down quietly and go to sleep.

The regular winter session of clinics and lectures the Bellevue and University Medical Colleges s closed, the examinations are over, and each llege graduated in the neighbourhood of 160 D.'s.

Accidental Rashes in Typhoid Fever.—In a er on this subject read before the Section of icine of the Royal Academy of Medicine in Ireland, Dr. John William Moore sums up *(Dub. Jour. of Med. Science)* his conclusions as follows:—1. Not infrequently, in the course of typhoid fever, an adventitious eruption occurs, either miliary, urticarious, or erythematous. 2. When this happens, a wrong diagnosis of typhus, measles, or scarlatina respectively may be made, if account is not taken of the other objective and subjective symptoms of these diseases. 3. The erythematous rash is the most puzzling of all; but the prodomata of scarlet fever are absent, nor is the typical course of that disease observed. 4. This erythema scarlatiniforme is most likely to show itself at the end of the first, or in the third, week of typhoid fever. 5. In the former case, it probably depends on a reactive inhibition of the vaso-motor system of nerves; in the latter, on septicæmia, or secondary blood-poisoning; or both these causes may be pre sent together. 6. The cases in which this rash appears are often severe; but its development is important rather from a diagnostic, than from a prognostic point of view. 7. Hence, no special line of treatment is required, beyond that already employed, for the safe conduct of the patient through the fever.

History of the Medical Profession.—The descendants of the early doctors of Upper Canada will be interested to learn that there is being prepared an historical account of those pioneer practitioners, by Dr. Canniff, the author of "The Settlement of Upper Canada." The work will give an account of the several steps in legislation to secure a proper standing of the profession, from the establishment of the Province of Upper Canada up to about the year 1850; 2nd, an account of the proceedings of the Upper Canada Medical Board; 3rd, a list of the medical men during that period, with biographical sketches. The Doctor urgently requests that the descendants of these worthies will kindly furnish him at once with information on the following points:—1, birthplace and date; 2, place of medical study and the degrees; 3, time of arrival in Canada; 4, places where he practised; 5, incidents in his professional life; 6, marriage, children and death.

Treatment of Atrophic Gastric Catarrh by Pancreatin.—The following from *Deutsche Med. Woch.* will be of interest to our readers:—In atro-

phy of the gastric glands or in the so-called atrophic catarrh of the stomach, the results obtained from therapeutic measures have thus far not been positive; it being impossible to restore the already degenerated glands. Being convinced that neither hydrochloric acid nor pepsin, or any other remedies were of any use in the treatment of this affection, Dr. Reichmann, of Warsaw, tried in ten cases (out of one hundred and seven cases treated for various gastric affections) an alcoholic extract of the pancreas (twelve to fifteen per cent.) and pancreatin, and was soon convinced that the formerly sluggish chyme digestion was now properly performed, the general condition of the patients being greatly improved.

THE USE OF ANTIPYRINE DURING LABOR.—The *Brit. Med. and Surg. Jour.* has the following:—Grandin (New York), has experimented with antipyrine as an analgesic in the first stage of labor, with gratifying results. His method has been to give fifteen grains of the drug, well diluted, and preferably with some stimulant, such as spiritus ammonii aromaticus, and to repeat the dose in one hour. Two hours later the patient is given ten grains, and this dose is repeated every two hours if necessary. In conjunction with antipyrine, Grandin uses chloral hydrate in fifteen-grain doses every three-quarters of an hour, until three or four doses have been given. The result of this combination Grandin has found to so far nullify the pains as to be scarcely perceptible in two instances, and in other cases to be simply uncomfortable. The progress of labor was not interfered with, and there was no evidence of injurious effect on either mother or child.

DIETETIC NOTES.—We would call the attention of our readers to the advertisement of the Lambert Pharmaceutical Co., of St. Louis, to be found on page 5. This Company has had prepared *Dietetic Notes*, suggesting the articles of food to be allowed and prohibited in several diseases in which their Lithiated Hydrangea has proven of special service. A neatly bound book of these dietetic notes, each note perforated for the convenience of physicians in detaching and distributing to their patients, will be sent free of cost; together with an illustrated treatise upon Catarrh and other monographs of more than ordinary interest, bearing upon the value of Listerine in the internal and external antiseptic treatment of disease.

THE form of the "Record of Autopsy," now in use at the Toronto General Hospital, is, we think, a very good one. An important step in the direction of securing useful and reliable statistics regarding the causes of death in all official post mortems, would be the issuing of said form, or at least some form, to the coroners in each county. It is well known that certificates to counsel, as to cause of death, etc, are often of so unscientific a nature, as to make the profession a laughing-stock in the courts. Dr. O'Reilly has compiled the form used, from a number of others, retaining what he thought was important and rejecting irrelevant matter, found in a number of similar blank forms he has examined. He has also added a table of the normal weight of the various important organs of the body, as no one can be expected to keep such figures always fresh in the memory.

LITHIUM AND ARSENIC IN DIABETES.—The treatment of diabetes mellitus by arsenic and lithium is, perhaps, the one which offers the best chance of success. We have already given, March, '88, Vigier's formula for their administration. We now take the following from the *Rev. de Therap.*:

Dr. Constantine Paul proposes the following:

Effervescing carbonate of lithium one dose, adding a few drops of Fowler's solution.

Dr. Dujardin-Beaumetz prescribes as follows:

To a glass of carbonic water add 7½ grains of the carbonate of lithium and two minims of Fowler's solution.

TEST FOR PUS IN THE URINE.—The *Pharm. Era* gives the following directions for the detection of pus in the urine:—Drop into the specimen of urine enough tincture of guaiac to give it a milky appearance, and heat it to 100° F. If pus be present, a blue tint will develop. The urine may also be passed through a white filter, and a few minims of the tincture of guaiac then allowed to drop on it; if pus be present, a distinct blue coloration will be produced.

BINIODIDE OF MANGANESE IN AMENORRHŒA.—This preparation of manganese is now frequently employed in place of the permanganate. In our practice it seems to be better borne by the stomach, and probably acts quite as efficiently. It matters not which preparation is used, the drug must be

continued for a long time to get satisfactory results in amenorrhœa. The biniodide should be given in doses of 2 grains, pill form, three times a day.

THE POTATO-CURE FOR SWALLOWED FOREIGN BODIES.—Dr. Salzer, at a meeting of the Medical Society of Vienna (*Berliner klin. Wochen.*), stated that he had treated a six year old boy who had swallowed a small weight, a woman, who had swallowed a set of teeth, and a nine year old girl, who had swallowed a nail, by the method advocated by Dr. Cameron, of Glasgow, which consisted in feeding the patients for several days on nothing but potatoes. This treatment, which in all three cases was followed by success, is a method in vogue among the pick-pockets of London, who, swallowing their booty, live on potatoes until the stolen articles appear *per vias naturales*.

DROPSY OF PREGNANCY.—Dr. Griffith, in an article on the above subject (*Br. Med. Jour.*), gives the following directions for treatment:—"Treat the patient as a case of acute nephritis with dropsy; if there is no distinct improvement within a reasonable period (from two to four weeks), and with less delay if the dropsy increases, empty the uterus. The best method for doing this is by the introduction of a clean bougie, leaving it in until labor is established; a couple of five-grain doses of quinine being given at the end of twenty-four hours, if the uterus needs further stimulation."

NITRO-GLYCERINE IN BRIGHT'S DISEASE.—This remedy seems to have a beneficial effect in the above disease. Prof. Muhasseme, says *L'Union Médical*, has been trying the effects of nitro-glycerine in nephritic cases, and, from a number of observations, concludes that nitro-glycerine diminishes the amount of albumen passed in the twenty-four hours; the amount of urine passed is increased in the twenty-four hours, and this increase is maintained for some time after the cessation of the drug.

DRAINAGE TUBES IN ABDOMINAL SURGERY.—"The rule about drainage tubes," says Goodell, "is that they should be left in the wound as long as there is the slightest trace of blood in the discharge. When it becomes serous, they should be removed, as they are liable to cause irritation, and delay convalescence. A point worth remembering is, to turn the drainage tube round every day. This prevents adventitious growths from extending through the holes, and thus making the tube difficult of extraction."

PERIPHERAL PARALYSIS.—J. L. Steven, M.D., reported, in the *Glasgow Med. Jour.*, three cases of peripheral paralysis, whose etiology was unknown, one being paralysis of the arm and the other two of the dorsum of the foot, causing the toes to drop. He treated them successfully by massage, with camphorated oil and ℥ j. doses of Easton's syrup three times a day.

GASTRALGIA.—The following is recommended (*Med. Summary*):—

℞.—Tinct. stramonii, ... ℥ ss.
Tinct. hydrastis, ... ℥ iv.
Aquæ, lauro-cerasi, . . . ℥ iiss.—M.

SIG.—℥ j in water, every four hours.

QUININE AND TANNIC ACID.—It it said that one and a half grains of tannin will neutralize the bitterness, without changing the action, of 10 grains of quinine. The intense bitterness of the drug renders it almost impossible to administer it to children in its natural state.

NITRO GLYCERINE HYPODERMICALLY IN HEART-FAILURE.—Dr. Firnell of Philadelphia reports three cases, says the New England *Med. Monthly*, in which two drops of a two per cent. solution of glonoin were injected hypodermically. He says: "One who has seen cases of heart failure treated in the usual way can have no conception of the brilliant results which may be obtained from this agent."

TREATMENT OF ACNE.—Isaak, of Berlin, gives the following formula, *Gaz. des Hôp.*, for acne:

℞ Resorcin . . . . 2½ to 5 parts;
Zinc oxide, } . . . . āā 5 "
Starch, }
Vaseline . . . . . 10 " M.

The same to be used as constantly as the occupation of the patient will admit. It is said to have a very rapid effect.

COCAINE POISONING.—The first fatal result from the use of this drug in England, is reported as having recently occurred at University College

Hospital. A solution of 20 grains to the ounce, prepared for washing out the bladder was inadvertently administered internally. The patient died in about an hour.

THE LATE DR. ROBERT P. HOWARD.—We regret to notice, just as we are going to press, the death of Dr. Robert P. Howard, Dean of the Medical Faculty of McGill University, Montreal. We desire to express our deepest sympathy with his sorrowing friends.

DRAKE'S PHARMACEUTICAL JOKE.—It is said that Drake, when the ships of the Armada turned their tails, sent to Elizabeth the word "Cantharides"—that is, "The Spanish fly."—*Ex.*

ERROR.—We wish to call attention to an error, occurring at p. 222, March issue of CANADA LANCET. In the prescription for chorea, the second line should read gr. j, *not* gr. iv.

DEATH OF JOHN C. DALTON, M.D., LL.D.

This eminent man died on Tuesday, 16th Feb., at the age of sixty-four. He had been suffering for some months from renal trouble. Born at Chelmsford, Mass., he was educated at Harvard, where he graduated in medicine in 1847. He held at different periods of his life the professorship of physiology in the University of Buffalo, the University of Vermont, and in the Long Island College Hospital. He served as Surgeon during a great portion of the late civil war. At the time of his death he was President of the College of Physicians and Surgeons of New York. Dr. Dalton was not a practising physician, but was ever to the front in the discussion of scientific medicine, and in touch with the views of the active members of the profession. His fame rests upon his skill as a teacher of physiology, in which he is said to have been almost unrivalled. He has contributed many monographs to medical literature, but his best known work is his text-book on human physiology, which has made his name a household word among physicians the world over. He was a warm friend and will be mourned by many to whom he had endeared himself by his manifold good qualities of heart and brain.

Books and Pamphlets.

THE MEDICAL ANNUAL, 1889. A complete work of reference for Medical Practitioners. Bristol, England: John Wright & Co. Sole agents for Canada, J. A. Carveth & Co., Toronto. Price $2.50.

This small work, prepared in dictionary form, will prove of great service to practitioners as a book of ready reference. In it the practitioner can find the newest views, especially as to treatment, in almost every disease, and briefly tabulated reliable results of the use of more modern therapeutic agents. It is excellent in its numerous suggestions and valuable as a reference handbook.

THE OPERATIONS OF SURGERY. A Systematic Handbook for Practitioners, Students and Hospital Surgeons. By W. H. A. Jacobson, F.R.C.S., Assistant-Surgeon Guy's Hospital, etc.; with 199 illustrations. Philadelphia: P. Blakiston Son & Co. Toronto: J. A. Carveth & Co. Price $5.

This is a very able treatise on operative surgery, and the illustrations are excellent. Of especial interest are the chapters devoted to injuries of head, to cerebral localization and operations in connection with injury to the head. The methods ordinarily resorted to in ligature of vessels, are taken up with much minuteness and care; indeed, all operations performable, are ably dealt with, as they pertain to particular regions. And as a work to which the practitioner can refer quickly for the details of an operation, it excels anything yet to hand.

EXPLORATION OF THE CHEST IN HEALTH AND DISEASE, by Stephen Smith Burt, M.D., Professor of Clinical Medicine and Physical Diagnosis in the New York Post Graduate Medical School and Hospital, etc., etc., pp. 206, cloth. New York: D. Appleton & Co. Toronto: Carveth & Co., 1889.

This is a well written book, concise and yet comprehensive. It embodies the methods pursu[ed] by Dr. Burt in his classes, and will be of great u[se] to the student, as well as to the practitioner w[ho] has become rusty in the exact methods of conduc[ting] ing physical examinations. His explanations [are] clear. One extremely good feature of the book [is] the definiteness with which he locates the viscer[a] and gives their normal relations to the parietes, [and] also the physical signs which can be developed [in] the normal chest.

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Original Communications.

THE DIAGNOSIS OF CHRONIC AFFECTIONS OF THE LIVER.

BY CHARLES SHEARD, M.D., M.R.C.S., ENG.

Lecturer on Clinical Medicine at Toronto General Hospital.

The diagnosis of chronic affections of the liver is always a matter of great interest and often of obscurity. The most common chronic affections of the liver met with in Canada are: 1. Carcinoma; 2. Hepatitis from obstruction to the egress of bile; 3. Cirrhosis.

Carcinoma.—The form of carcinoma which most frequently affects the liver is medullary cancer, although scirrhus is occasionally to be met with. It frequently invades the liver from contiguity of tissue from the pyloric end of stomach or may begin in the liver, in which latter case its diagnosis is more difficult. The commencement of the disease is usually at the transverse fissure, when it appears in the fibrous tissue of that locality, or from disease of the lymphatic gland or glands, which are usually to be found there, and from this point the disease may extend on the under surface of the liver into the right or left lobe, deeply into the parenchyma of the organ without causing any pain or even much constriction of the bile ducts. I think it will be generally conceded that pain in viscus is largely proportionate to the degree volvement of the peritoneum, and this fact is n misleading. We often see extensive and active ammatory disease of the liver without pain, and the kidney the same thing may occur to a ater and more remarkable extent; in such cases disease usually begins at the hilus of the organ, ace invading the parenchyma and leaving the toneum comparatively free from involvement. In such cases, of growth involving the portal fissure of the liver, that organ may be displaced upwards and show by palpation and percussion considerable enlargement, without nodosities or much irregularity of surface, because of the seat of the disease, and in this we have a most confusing condition; soon however the hepatic duct becomes involved, and often the cystic duct and common bile duct as well, giving us one of the main, and most important symptom of carcinoma, viz., persistent jaundice. Murchison, in his able treatise on diseases of the liver, remarks, (page 210), "The co-existence of enlargement of the liver with persistent jaundice ought always to raise the suspicion of cancer." This jaundice is the result of direct pressure upon the duct or ducts by a carcinomatous growth, and consequently the appearance of a distended gall-bladder is not, as some hold, very strong evidence *against* the diagnosis of cancer. I have seen several cases of persistent jaundice occurring in patients above the age of forty years, and in most of these, where a post-mortem was obtained, carcinoma was present. In all such cases it is necessary to regard very carefully the history of the patient, especially as to his having had attacks of hepatic colic, for in the condition of hepatitis from destruction of the bile ducts, jaundice may be so severe, and the attacks so frequent, that it is practically persistent, and there may at the same time be great enlargement; in all such cases there will be a clear history of hepatic colic, and often, whilst the patient is under observation, an attack may occur, and the passage of a gall-stone be verified.

Next to jaundice the most important symptom is the presence of enlargement, with irregularities or nodosities upon the surface, so that hard and painful lumps may be easily made out; the presence of such places the diagnosis of carcinoma beyond dispute, often, however, the development and the rapidity of the new growth is at one principal seat, and though the remaining portions of the liver may be affected, these portions of new growth are comparatively small, often not larger than a split pea or bean, umbilicated in their centre and such as could not easily be discerned with certainty by palpation through the abdominal wall, but the method of enlargement, the greater growth of the right lobe which is in almost every case noticeable, and the marked irregularity of the edge

of the liver are valuable diagnostic points in favor of carcinoma.

Ascites is also an important symptom, and be gins early ; the involvement of the main trunk of the portal vein in the growth leads to obstruction in the mesenteric veins, and hence ascites is usually marked. This serves to a certain extent to distinguish carcinoma from hepatitis, from obstruction in which latter case there is little or no ascites, although the intestines may become greatly distended by gas, and gas being also in the peritoneal cavity might, to a careless observer, present a condition very similar to ascites. Ascites, whilst of value in helping one to come to a diagnosis is not of unmixed value inasmuch as the fluid in the abdomen sometimes renders palpation and percussion of the liver difficult, and so many are the conditions of the liver which produce it that in cases of carcinmoia it is not wise to lay too much value upon it. Hæmatemesis from obstruction of the gastric vein is less frequently seen in carcinoma than in cirrhosis, and is usually a later symptom. Soon the patient becomes markedly emaciated, and with the extension of the growth to the peritoneal surface of the liver or into the peritoneum lining the abdominal wall, the pain becomes the severe and most distressing symptom, revealing very plainly at a later stage the nature of the disease.

Softening and suppuration of a carcinomatous mass, producing hectic symptoms, is occasionally seen, and such have been tapped, when the grumous bloody fluid which escapes shows but too clearly that the case is one of carcinoma.

II. *Enlargement of th: liver associated with obstruction, or catarrh of the bile ducts.*—In these cases the liver is the subject of attacks of temporary engorgement which are attended by hepatic tenderness, slight peri-hepatitis, and jaundice often severe and oft-recurring, so that it may be said to be all but continuous. Here there is enlargement of the entire organ, the bile ducts are distended, the larger of which form sac-like dilatations, containing bile which may be seen throughout the liver. I remember in one case where a post-mortem examination of the liver substance showed numerous deposits of the size of a sixpence, and filled with caseous matter, and in some a few drops of pus were to be seen, giving to the whole liver the appearance of its having been affected with multiple abscesses from obstruction of the bile ducts, and which abscesses had undergone caseous degeneration ; such cases so far as they have been verified by post-mortem examination are undoubtedly rare, but I am of the opinion that in a less advanced state they are comparatively common. Such cases are, of course, entirely distinct from "biliary," "hypertrophic," or "monolobular" cirrhosis, in which latter condition hypertrophy of the bile ducts and increase in their number constitutes the chief pathological change, and such occurs apart from any obstruction to the egress of bile ; on the other hand enlargement from obstruction has its most common cause in gall-stones, or catarrh of the bile ducts from continued over-engorgement, and from syphilitic disease ; such cases occur in patients past thirty-five years of age, they are attended with jaundice, show a history of attacks of hepatic cholic ; the abdomen is distended and tympanitic in character ; there have been attacks of severe pain referable to the region of the liver (peri-hepatitis), with severe constipation. On palpation the liver may be found considerably enlarged and its surface smooth, the gall bladder distended and tender to pressure. The diagnosis of this condition can rarely be made with certainty ; it can be distinguished from carcinoma by its smooth surface, by the absence of ascites, and the even manner of the progress of the hepatic enlargement, and attacks of hepatic colic ; there is gradual progression, the patient getting constantly weaker, the liver constantly enlarging without at any time presenting a distinct tumour, death occurring from inanition. From amyloid disease it can be distinguished by the painless nature of the latter, by the absence of the common cause of amyloid disease, viz., prolonged suppurative discharge, and by the rapid and enormous amount of enlargement which is so remarkable a feature in the amyloid change. From fatty disease of the liver it is easily differentiated ; rarely does a fatty liver extend below the umbilicus, and in fa livers attacks of pain are not usual.

III. *Common Cirrhosis.*—This is in the m one of the simplest affections to diagnose, occas ally however it presents peculiarities in its co and developement which are very misleading, of which is enlargement. Theoretically and l ologically it is true that enlargement pre

contraction in cirrhosis, but cases in which marked enlargement of the liver is to be noticed as a precursor to its contraction are rare; ordinarily the enlargement is so very slight in degree that it cannot be positively determined, usually fatty degeneration precedes contraction causing slight enlargement, such a liver may be attacked by a more active inflammatory change causing acute symptoms which will be followed by rapid contraction.

In cirrhosis of the liver the chief and permanent pathological change consists in a growth of fibrous tissue throughout the organ, which like cicatricial tissue subsequently undergoes great contraction and exerts its evil influences principally through pressure; bearing this fact in mind, the clinical interpretation of any symptom occurring in the course of cirrhosis should be comparatively simple.

Pressure symptoms referable to the portal vein or its tributaries are the most prominent. Ascites, early in occurrence, persistent after its first appearance, and severe in degree, is the most distressing and also the most suspicious symptom of cirrhosis; the portal vein becomes early occluded and such occlusion obstructing the messenteric veins leads to their dilatation and to constantly increasing ascites.

Hæmatemesis from obstruction to the egress of blood from the gastric vein assisted by associated cirrhosis in the gastric mucous membrane or acute inflammation of that membrane, together with occasional hæmorrhages from the bowels are serious symptoms.

Hæmorrhoids from pressure upon the lesser hæmorrhoidal veins, and enlargement of the superficial abdominal veins resulting from the same pressure, furnish a chain of symptoms the links of which are always more or less perfect and constant.

Together with the pressure from the growth and development of fibrous tissue within the organ, [illegible] is atrophy of the parenchymatous elements [illegible] he secretion of bile is more or less interfered [illegible]. Jaundice in cirrhosis is not usually a [illegible]ed sympton, but may appear late in the dis[illegible] when it is apt to be persistent. During the [illegible]alled "congestive stage" of cirrhosis, attacks of [illegible]idice may appear, when, if of long duration or [illegible]evere, they constitute a very unfavorable [illegible] Severe jaundice occurring in a patient who has been for many months the subject of cirrhosis, may be regarded as an alarming symptom, and such attack is often attended by acute delirium or by low muttering delirium, in which condition death occurs. It must not, however, be forgotten that true jaundice, *i.e.* where bile-coloring matter stains the skin and conjunctiva, and escapes with the urine, is not a common feature of cirrhosis. The sallowness of the face, and the dull dark skin which is so commonly seen in old drinkers, is not jaundice, nor is it at all certain that hepatic disorder has anything to do in producing this condition.

It is common enough to rely upon the history of the patient's habits, to determine the existence of cirrhosis, but nothing can be more misleading, whilst it is established that the abuse of alcohol is the common and potent cause of this condition, it is also established that cirrhosis may occur apart from alcoholism, and the differences of opinion regarding the form of beverage most liable to induce cirrhosis are endless.

And there can be no doubt that whilst many old topers escape, after years of hard drinking, without any or with very slight disease, in others, very much smaller quantities of alcohol will produce very rapid and very serious tissue changes in the liver.

Many German authorities believe that malt liquor is as apt to induce cirrhosis as the strong spirits, and it is very probable that in individual cases they act as powerful factors. I think we must recognize the fact that the tendency to sclerosis of all organs is greatly predisposed to in some, and apt to follow upon trifling inflammations or slight congestions and if such be a fact, it is wrong to trust too much to the patient's history as proof of the impossibility of cirrhosis.

I would here submit a very excellent comparison, given by Woodhead, of the pathological changes between "common" and "biliary" cirrhoiis.

In Common Cirrhosis.	*In Biliary Cirrhosis.*
1.—The bile ducts are but little involved in the growth of connective tissue, there is little or no jaundice or bile staining of the liver tissues, and no new bile ducts are found on microscopic examination.	1.—The bile ducts are the first structures involved the jaundice and bile staining of the liver substance is, as a rule, well marked and there is a new formation of bile ducts.

2.—In consequence of the new growth of tissue along the course of the portal veins, especially the medium sized branches, ascites is a very common complication in this form, as are also hæmorrhoids, varicose conditions of the veins of the œsophagus, congestion or even hæmorrhage in the gastro-intestinal tract.	2.—The portal veins are not involved in the change and ascites and the rest are rare.
3.—In the early stages, in consequence of the increased amount of young connective tissues in the portal spaces, there is enlargement of the organ, but in the later stages where this tissue is becoming fibrous and cicatricial and is contracting, there is as a rule a considerable decrease in the size of the liver.	3.—In consequence of the large amount of new tissue diffused throughout the organ, it is considerably increased in size.
4.—The liver is rough, with projections about the size of a hobnail on its surface. The capsule is thickened and opaque, especially at the bottom of the fossæ which surround the projections.	4.—Surface is smooth (morocco leather feeling) and the capsule is not thickened.
5.—The masses of liver cells vary very much in size, some consisting of several lobules, whilst others are smaller than a lobule. Each of these masses forms a distinct area, having a rounded outline surrounded by a fibrous, zone and from the fibrous capsule the mass of liver cells can be easily turned out.	5.—The masses of liver cells consist of single lobules, which are, however, considerably diminished in size and the cut surface has a more or less uniform and finely granulated appearance.
6.—On microscopic examination it is seen that the process is going on chiefly at the periphery of the lobules, but that groups of lobules are affected.	6.—The single lobules above mentioned are surrounded by bands of fibrous tissue, which bands, however, are not confined to to the periphery, but invade the substance of the lobules.

HYDROPHOBIA.*

BY CHARLES W. DULLES, M.D., PHILADELPHIA.

Since I first began to make the disorder called hydrophobia the subject of special study, nothing has given me more encouragement than the request of this Society at its meeting in Williamsport in 1886, that I continue my study and report its results to the Society. This request was the more welcome, because it seemed to furnish a confirmation of my hope that it might prove useful for one to make a serious matter the subject of continous investigation, and to lay before his professional brethren, from time to time, the results of his studies.

A year ago, I gave you a brief statement of the developments in regard to hydrophobia during the year then completed, and this required me to devote considerable space to the progress of the method of Pasteur. To-day I can spare you any long presentation of this part of the subject, for the reason that Pasteur's method hardly attracts any attention now, and seems to be in a fair way to die a natural death. The result of his operations may be gathered from a report of Dr. Dujardin-Bearumetz on the subject of hydrophobia in Paris, during 1887, published in the *Gazette Hebdomadaire* of March 9, 1888.

According to this report, there were nine deaths from hydrophobia in Paris during that year, which was *more* than in 1880, 1883, 1884, or 1886. Five of these deaths were of persons less than fifteen years old. In one of the cases the patient was not bitten at all, but was simply licked on an abraded spot. Eight of the patients were bitten by dogs, and one by a cat. Two of the nine patients had been treated by Pasteur; and their death is explained by Dujardin-Beaumetz on the ground that his method was not thoroughly carried out. The total number of persons treated by Pasteur was only 306 persons from Paris, bitten by dogs supposed to be rabid, as against about 300 a month when I last addressed you.

This statement shows two very important things: One is, that the application of Pasteur's method has had no effect in reducing the usual mortality from so-called hydrophobia in Paris—which confirms the opinion in regard to its merits which I have repeatedly expressed; the other is, that, i spite of the artifical stimulus furnished by th French reception of Pasteur's method, the numb of those who fall into the terror of hydrophob is diminishing in France, and this leads to the hc that before long France will compare favorab with Germany and America, which have refu to be carried away by the false notions in reg to hydrophobia put forward by one who kn

*From the Medical Transactions of the Medical Society, of Pennsylvania.

nothing about it but what he has manufactured in his laboratory.

It must impress you, I think, as it has impressed me, that there is a great significance in the fact that disbelief in the theories of Pasteur, which some of his partisans have stigmatized as harsh or unscientific, has been found to go with a singular immunity from the ravages of so-called hydrophobia. This holds true to such an extent, that one may safely say that the degree of acceptance of Pasteur's theories in any country will furnish a measure of the number of cases and deaths from hydrophobia. In Germany, these theories have never obtained a foothold, and hydrophobia is almost unknown; in America, the attempt to import them ended in speedy failure, and here hydrophobia is almost equally unknown.

You may, perhaps, be interested to learn that in our State of Pennsylvania, not one case, even of suspected hydrophobia, has occurred since we met a year ago. And, from the whole of the United States, I have gathered only fourteen deaths (about one in each 4,000,000 inhabitants) from hydrophobia—credible or incredible—during the year since we last met.

I have carefully studied the details of these cases and have prepared an epitome of the history of each one for your study and reflection. You will see that only a few have been reported in the medical journals, and the majority of the accounts are derived from daily newspapers. This fact is to be regretted, and I would be glad to give you more reliable data than can be gained from secular papers; but my attempts have been almost fruitless, when I tried to get precise histories of the cases; and I regret this the more, because, when I succeeded in getting more accurate accounts, the cases lost many of the features of hydrophobia.

The following are the histories of these cases as I have been able to obtain them:

Case I.—Man (Gurnee, Haverstraw, N.Y.). ten on thumb by pet dog, May 25, 1887. Dr. B. Bailey called, and "dressed" the wound. g died in a fit two days later. The patient was rmed. June 20, had pain in same hand and a. June 22, could not drink or wash. Drs. ley and House called and agreed that he had lrophobia. He had violent spasms, and was t under the influence of anodynes, atropia, and phia administered hypodermically. Dr. W. A. mond, of New York, was called in the evening and confirmed the diagnosis, and endorsed the treatment. The patient grew steadily weaker, and *died* June 23, 1887, at 10 a.m.—*Med. and Surg. Rep.*, June 23, 1887.

Case II.—Woman, twenty years old (Delia Bentcliff, near Bridgeton). Attacked and severely bitten on back and shoulder, in March, 1887, by a large bulldog, which on account of his bad temper had been chained for several months. "The terrors of hydrophobia were constantly pictured to her," and she became ill *with symptoms of typhoid fever*. Dr. Currie, of Beverley, saw her in the beginning of July. He diagnosticated typhoid fever. This was followed by blood-poisoning. She now refused food and had convulsions, and "positive" signs of hydrophobia. She raved and frothed at the mouth. *Death* from exhaustion occurred July 20, 1887.—*New York World*, July 25, 1887.

Case III.—Man (Hannibal Crosson, Faircloth, Georgia). Bitten slightly on the hand in March, 1887, while driving off a strange dog which had attacked two of his own dogs. Both these dogs subsequently died. July 17th, he failed in an attempt to drink water and developed a dread of water. A physician diagnosticated hydrophobia, and had four men to hold the patient while a tablespoonful of water was administered as a test. Horrible convulsions followed. The patient "snapped, growled, and whined." *Death occurred* July 22, 1887.—*New York World*, July 24, 1887.

Case IV.—Man (James P. Cody, Peoria, Illinois), twenty-three years old. July 3, 1887, a cat endeavored to pass him, struck against a gate-post and fell. The man picked it up, and was bitten in the left hand near the thumb. The cat had to be choked off. August 12, he was indisposed. The next day he swallowed water with difficulty, and had a "thrill" when he placed his hand in water. Hydrophobia was diagnosticated, and the man was transferred to a hospital at Sedalia, Missouri. Remedies for quieting him were given. August 15, he was restless, and an attempt to drink water caused convulsive movements. *Death occurred* at midnight.—*Philadelphia Inquirer*, August 19, 1887.

Case V.—Man, seventy-eight years old (Cedar Springs, Mich.). Bitten, in 1839(!), on hand by a dog said to be rabid. Wound sucked and next day excised and cauterized. Two men bitten same day by same dog, one said to have died of "hydrophobia" in four weeks, and one of "blood-poisoning" in a few days. *Thirty-eight years later* the patient had horror of water, inability to drink, incessant spitting, paroxysms of violence caused by pouring or dripping water in his hearing. He tried to bite and tear his attendants. Dr. Fred. R. Boyd, who reports the case, gave him large doses of morphia hypodermically, five grains at a

time until twenty grains were given in a short period, and chloral hydrate. *Death occurred* September, 18(?), 1887. (The dates are mixed in the report.) He had had an attack of hydrophobia ten years after being bitten.—*The Medical Age*

CASE VI.—Man (Charles Cavanan, New York), twenty-seven years old. Bitten October 8 in little finger, by a bull-dog which he separated from another dog with which it was fighting. The wound was cauterized at Chamber Street Hospital and healed well. November 11, the man had a spasm of the throat when drinking beer at a bar, began to froth at the mouth, and became cross and sleepless. November 14, he went to the same hospital, where he had profuse salivation and convulsions, followed by delirium. Hypodermics of curare and morphia were used. He said he "knew he was going to die." A strait-jacket was put on him, and he was held by a strong nurse. *Death occurred* November 16, 1887.—*New York Herald*, November 17, 1887.

CASE VII.—Man (Samuel J. Foster, Sedalia, Mo.). No history of a bite. He came to the hospital in Sedalia, November 23, 1887, with pain of stomach. He "showed symptoms of hydrophobia" at 2 p.m., and was tied hands and feet, and bound to an iron bedstead. Soon after he had violent spasms. Hypodermics of curare were given, and then hypodermics of morphine. *He died at* 7.25 p.m. the same day. —*New York Tribune*, November 25, 1887.

CASE VIII.—Man (Marshwald, New York.) Bitten September 8, 1887, by a Newfoundland dog, kept as a watch dog. No evidence that the dog was rabid or sick, but it was killed at once. The man was greatly alarmed, and went to a hospital every week to have the wound examined. He was a hard drinker, and was treated for *delirium tremens*. November 27, he went to the hospital saying he had hydrophobia. He was treated with brandy, chloral, digitalis, and hypodermics of curare. He was confined in a strait-jacket, and several men were employed to hold him. *Death occurred* November 29, 1887.—*Med. and Surg. Rep.*, December 31, 1887.

CASE IX.—(See case XII.) Man (George Norman, New London, Mo.). Bitten by dog last summer, but he paid no attention to it. No history of dog. November 28, he awoke from a dream that he was dying of hydrophobia, and told his friends of it, and immediately had symptoms. Six men struggled with him for twelve hours. He begged his friends to kill him ; and finally *died in convulsions* November 29, 1887.—*Chicago Tribune*, December 1, 1887.

CASE X.—Man, fifty-two years old (Stephen Dietrich, Cincinnati, Ohio). October 17, 1887, his pet Scotch terrier returned after a few days' absence from home, and when playing with his master struck his lower lip so that it bled. (Not clear that it was not a wound made in lip by man's tooth.) The dog died four days later. December 1, while the man leaned over a vat of scalding hot water, he had some difficulty in breathing. His friends told him that hydrophobia began that way. Dr. Andre called in the evening, and at once discovered symptoms of hydrophobia, and took him from his home at Camp Creek to the Good Samaritan Hospital at Cincinnati, after he had prepared to die and bade farewell to his wife. He arrived December 2, and came under the care of Dr. Whittaker, who regarded the case as one of hydrophobia, and lectured on the patient at a clinic. The man was tested with water His treatment included chloral and morphia by the rectum and hypodermically, and cocaine and curare by the mouth, and chloroform by inhalation. The patient never slept; he spit incessantly, and insisted he would die of hydrophobia. *Death occurred* December 3, 1887. (See *Med. and Surg. Rep.*, December 17, 1887, and *Cincinnati Enquirer*, December 4, 1887.)

CASE XI.—Woman (Mrs. John Loughran, Hot Springs, Ark.). Bitten about October 15, by a vicious dog which had attacked her children. "A madstone was applied and no serious results were apprehended." December 2, she had a chill, and afterwards dread of liquids, and convulsions. She *died* December 4, 1887.—*Chicago Tribune* December 6, 1887.

CASE XII.—(See Case IX.) Man, eighteen years old (George Norman, St. Louis, Mo.). Bitten on the nose about November 30, 1887, by a strange dog, to which he gave a bone. The dog ran away and nothing was thought of the bite. January 24, 1888, said he had hydrophobia. Dr. Dunlap was summoned. Chloroform given; tests with water caused spasms; but he could and did not drink water and milk. Had a "fit." Morphine given hypodermically. Became enraged at the doctor and was bound, but broke loose and became violent. In his nightgown rode a distance, yelling loudly; calmed down, and said "he had hydrophobia and must die." January 25. *died* in convulsions.—*New York Herald*, January 27, 1888.

CASE XIII.—Man (William Bowen, Atlanta, Ga.), twenty years old. About December 1, 1887, savagely attacked, and hand and arm badly lacerated by a large dog. (No history of dog.) The wounds healed rapidly. January 28, the young man had nausea, spasms, and delirium. At the sight of water he howled, whined, and frothed at the mouth. *Death occurred* January 29, 1888.—*New York Herald*, January 31, 1888.

CASE XIV.—Girl (Mary Riley, West Chester, New York), nine years old. Bittten badly about December 18, 1887, on the leg by a large Newfoundland dog (no suspicion of rabies). Wound

healed rapidly. About February 8, 1888, she was bitten in the face and neck by the same dog, which was then killed. About March 1, she began to behave strangely, and Dr. McNichol "at once discovered that she had symptoms of hydrophobia." March 7, she began biting like a dog, and became frantic at the sight of water. She tried to bite the doctor and had to be tied down. Opiates "had no effect upon her." *Death occurred* March 8, 1888.—*Philadelphia Evening Telegram*, March 10, 1888.

CASE XV.—Boy (Arthur Tates, near Carthage, Illinois), eight years old. Bitten March 27, 1888, on the face, by a large shepherd dog, which afterwards attacked a man and escaped. The wound was carefully cauterized. April 26, he acted strangely, and soon had spasms and snapped and bit and went into convulsions at sight of water. Physicians were called and said he had rabies. The boy was tied to the bed and held by three men, and was given "powerful opiates, which did not allay the awful spasms." *Death occurred* April 29, 1888.—*New York Herald*, May 1, 1888.

The tabular statement of the foregoing cases, which I have prepared, will spare me the trouble of a detailed analysis. But, I would call your attention to a few points which have impressed me in studying it.

1. *The effect of anticipation of hydrophobia.*—This is said to have been present in seven of the fifteen cases, and may be suspected in more.

2. *The lack of evidence of rabies in the animal which did the biting.*—Not one of the animals furnished more than ground for a suspicion that it was rabid. The fact that a fighting dog bites a man who interferes with it, is no evidence that it is rabid, nor is the manifestation of a vicious temper a good evidence of rabies. The same may be said of death in a fit.

3. *The effect of a diagnosis of hydrophobia.*—In ten of the fifteen cases it is stated that the physicians made an early diagnosis of hydrophobia, and presumably they failed to conceal the fact from the patient.

4. *The effect of applying the test of the water.*—This is said to have been done in seven of the fifteen cases, and it was probably done in almost of them.

The assertion that canine symptoms were ent.—Five of the patients are said to have ned, or howled, or snapped, or bitten at their dants.

The frequency of forcible restraint.—This is o have been employed in eight of the cases.

The uselessness of administering narcoties.—rful narcoties are said to have been used in ten of the cases; and they were probably used in all. Curare is said to have been used in four cases.

You will, I trust, permit me to think that my prolonged study of hydrophobia has produced something which may be called an opinion—not prejudice—in regard to its nature and treatment; and I should be a coward if I hesitated to express my opinion for fear that I should once more be accused of prejudice. I have on several previous occasions declared my belief that hydrophobia is not a specific inoculable disease. I believe this more firmly to-day than ever before. I do not deny that men and women and children sometimes fall into a peculiar state after a dog-bite, and die in due time. But I do deny that this is attributable to any specific virus in the dog's saliva. The same thing has occurred too often from other causes, to justify one in charging it to a specific virus when it follows a dog-bite. And, I believe that rejection of the specific theory will do more to banish hydrophobia from the world than anything which we have ever heard of.

The word "hydrophobia" should be used only to describe a condition—and not a disease—as we use the word "convulsions," and it should be remembered that this condition may be present in a great number of diseases, as I tried to show you when you last met in this city, in 1884.

I firmly and honestly believe that if this view of what is called hydrophobia were generally accepted, the disorder would shrink and disappear as the genie is said, in the tales of the "Arabian Nights," to have shrunk and disappeared when the right word was spoken. And, I call your attention to the fact that hydrophobia is now almost unknown in our own State of Pennsylvania. Not a single case has occurred in our State since we last met, and I cannot but attribute this fact partly to the extent to which your judgment confirms the opinions to which my studies of hydrophobia have led me.

I do not despair of seeing the belief in hydrophobia follow the belief in witchcraft, which once had the support of Church and State, of the medical profession and the laity, but which now, thank God! torments our fellow-men no more. So long, at least, as Pennsylvania presents the spectacle of freedom from the thraldom of ancient superstition, in regard to hydrophobia, and freedom from its curse, I cannot but think that the former has some causal connection with the latter.

TABLE OF CASES OF SO-CALLED HYDROPHOBIA IN THE UNITED STATES FROM JUNE 1, 1887, TO JUNE 1, 1888.

CASE No.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	XII.	XIII.	XIV.	XV.
Male	1	....	1	1	1	1	1	1	1	1	....	1	1	....	1
Female	....	1	....	....	....	....	....	....	....	....	1	....	....	1	....
Age (years)	Adult ..	20	Adult.	23	78	27	Adult	Adult	....	52	Adult	18	20	9	8
Incubation (days)	26	105	90	40	38 years	35	....	49	90	45	49	55	60	75	30
Species of animal	Dog	Dog	Dog	Cat	Dog	Dog	*	Dog	Dog	*Dog	Dog	Dog	Dog	Dog	Dog
Location of bite	Thumb..	Back and shoulder	Hand	Hand	Hand	Little finger	....	....	....	*Lip	*	Nose	Hand and arm	*Leg face and neck	Face
Wound cauterized	*1	....	....	....	1	1	....	....	....	....	....	....	....	....	1
Dog died soon	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....
Dog savage	....	1	....	....	....	....	....	....	....	....	1	....	1	1	1
Dog fighting at time of bite.	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....
Dog said to be strange	....	....	....	....	....	....	....	....	....	....	....	1	..	....	....
Patient said to have anticipated hydrophobia	1	....	....	....	....	1	....	1	1	1	....	1	....	....	....
Hydrophobia diagnosticated	1	....	1	1	1	1	1	1	....	1	....	....	....	1	1
Horror of water stated	1	1	1	1	1	1	....	....	1	1	1	1	1	1	1
Patient tested with water	....	....	1	1	....	....	....	....	....	1	....	1	1	....	1
Dog-like symptoms.	....	....	1	....	....	1	....	....	....	....	....	....	1	1	1
Forcible restraint used	....	....	1	....	....	1	1	1	1	.. ..	....	1	.. .	1	1
Powerful narcotics used	1	....	....	1	1	1	1	1	....	1	....	1	....	1	1

*Case I. Wound said to have been dressed.

Case II. Said to have had typhoid fever.

Case VII. No history of a bite.

Case X. By no means clear that he was bitten at all

Case XI. Said to be bitten severely, but not where.

Case XIV. Bitten on leg about Dec. 18, 1887, and on face and neck about Feb. 8, 1888.

Case I. Morphia and atropia.

Case IV. Quieting medicines.

Case V. Morphia in 5 gr. doses.

Case VI. Morphia and curare.

Case VII. Morphia and curare.

Case VIII. Chloral and curare.

Case X. Morphia, curare, chloral and chloroform.

Case XII. Morphia.

Case XIV. Opiates.

Case XV. Powerful opiates.

Case X. A "mad-stone was applied to wound.

Correspondence.

OUR NEW YORK REPORT.

From our own Correspondent

NEW YORK, April 25th.

RECENT METHODS OF TREATING RETROFLEXION OF THE UTERUS.

The treatment of this important affection of the uterus during the last few years has undergone a complete revolution. The pessary seems to be on the eve of discardment, for one will see many cases of this displacement at the hospitals and clinics before he will have the opportunity of seeing a pessary introduced for the relief or cure of it.

The shortening of the round ligaments or Alexander's operation, and the more recent one of hysterroraphy have taken its place.

The main pathological lesion of retroflexion is now regarded as a lengthening or stretching of the round ligament which holds the uterus in its normal position of slight anteversion and anteflexion. If this view be correct it is obvious that the pessary can no longer be regarded as a curative measure, and some plan must be adopted which corrects the pathological lesion itself and thus at once effect a complete cure.

As to the correctness of this view there can now be but little doubt, for it has been demonstrated time and time again, both on the living subject and the cadaver, whereby from the simple process of shortening the round ligaments, the retroflexed uterus has been made to occupy its normal position.

Gynæcologists now believe, that in the operations of Alexander and hysterroraphy, they have at once found a rapid and rational method of cure.

To Prof. Polk is due the credit of having first performed and demonstrated the advantages of Alexander's operation in America. Hysterroraphy was first suggested by Marion Sims; Sänger of ig advanced the technique of the operation to resent status, and finally Dr. Kelly of Philaia, gave it the name which it now bears. different and varied sources the following s to be the limitations of each operation. der's operation is to be preferred in all those which the uterus is retroflexed and can be replaced by the sound or fingers, and in dhesions are found to exist, if there are adhesions it is worse than useless. It can also be performed for retroflexion of the uterus accompanied by prolapse of the ovaries and prolapsus uteri.

Hysterroraphy is to be preferred in those cases where the uterus is bound down and adherent, and especially in those most intractable cases in which the retroflexion is accompanied by prolapse of the ovaries and tubes, and the whole adherent and matted together. In such cases the adhesions must first be separated, and then the uterus secured in position; if the tubes and ovaries are much diseased they had better be removed before the uterus is fixed.

In cases of prolapsus uteri the general opinion is that it is to be preferred to Alexander's.

The following is the method in which Professor Polk performs the Alexander's operation, and which your correspondent had the opportunity of seeing:

The patient is placed on the back, lower part of the abdomen is washed with soap and water, shaved, then douched with 1-2000 bichloride, and finally washed with ether. The incision Prof. Polk prefers is one just above the spine of the pubes, and extending for 1½ inches on either side of the median line; all the tissues are then carefully dissected with a scalpel, so that the external inguinal rings on both sides are displayed. Another method of making the incision is to start just above the spine of the pubes, and to run upwards and outwards parallel to Poupart's ligament to the extent of two inches on either side; this, however, necessitates two incisions, and has no advantage over the single one.

The external rings having been displayed, the round ligament is carefully sought for in the mass of fat occupying the opening of the ring, picked up with a pair of forceps and carefully drawn out to the extent of two inches on both sides. If the finger is now introduced into the vagina the uterus will be found to occupy its normal position. The ligaments are stitched with catgut to the edge of the external rings and pubes, and the superabundant two inches may be cut off with scissors, or else interlaced and stitched to the same portion of the opposite ligament. The wound is then irrigated with 1-2000 bichloride, a small drainage tube inserted, stiched with catgut and dressed with iodoform and Theirsch gauze.

Prof. Lusk performs hysterroraphy as follows:—

Patient is placed in the dorsal decubitus, abdomen carefully washed with soap and water and shaved. Then it is douched with 1-2000 bichloride and finally cleansed with ether to remove all oleaginous material. An incision is then made in the median line about two inches in length, just above the pubes, and the tissues carefully cut through until the peritoneum is reached. All hæmorrhage is then arrested with clamps, etc., the peritoneum picked up between two artery forceps and incised. The finger is then introduced into the peritoneal cavity and the position of the uterus made out. If there are no adhesions it is simply brought up to the abdominal wound, and a curved needle armed with silk is then passed through the broad ligament just external to the cornua, so as to include only the round ligament, (this point is not essential, as the round ligament may be secured at any point in the broad ligament and at a considerable distance from the uterus). The needle is then passed through the anterior abdominal wall at the side of the incision, just above the pubes, to the extent of one quarter inch in depth and then tied.

The other side is treated in a similar manner; thus we have the uterus firmly held upwards and forwards by the round ligaments being firmly fixed to the anterior abdominal wall. The peritoneum is then sewed up with medium-sized catgut, and the remaining tissues with silk, and the wound dressed antiseptically. If there are adhesions between the posterior surface of the uterus and the peritoneum, they are broken up with the finger; if the tubes and ovaries are found sufficiently diseased they are removed, the uterus secured as above and all hæmorrhage checked with hot water, (115°).

The peritoneal cavity is now sponged dry and closed. If, however, there is considerable oozing, a glass Bantock drainage-tube is inserted well down into the pouch of Douglas and left there for forty-eight hours, and the peritoneum and other tissues sewed up in the same manner. The glass tube is exhausted every one or two hours, as may be necessary, until the oozing has stopped, when it is removed.

Alexander's operation is the more popular, for the simple reason that it is extra-peritoneal and as devoid of danger as the simple operation of trachelloraphy. Hysterroraphy is attended with all the dangers of a laparotomy, and although these have been reduced to a minimum by the specialist, still it will be doubtless some time before the general practitioner performs it for simple retroflexion.

The interesting question has been raised that, should patients on whom these operations have been performed become pregnant and subsequently be delivered, what would be the position of the uterus after delivery? Alexander's operation has been performed on patients who subsequently were delivered of children, and the uterus was found to be in good position. As yet no such report has been made on a hysterroraphy case.

OUR LONDON LETTER.

To the Editor of the CANADA LANCET.

SIR,—I think that the discussion which took place at the meeting of the Royal Medical and Chirurgical Society on Tuesday evening last, may be of some interest to your readers, as it touched upon a point which, as far as I am aware, has not hitherto been suggested by any English writers, and has only been hinted at by one continental author, viz., the clinical significance of clay-colored stools, unaccompanied by jaundice, in their connection with diseases of the pancreas. Dr. T. J. Walker, the author of the paper read before the Society, just referred to the hitherto universally accepted view that the presence of clay-colored stools always indicated some disorder of the liver. He then cited two cases which he had had under observation through several years of their lives, and on which subsequently, necropsies had been made; in both of which large, greasy, clay-colored stools had been continuously passed for some years, and in which no symptoms of biliary derangement were present; on *post-mortem* examination both cases were found to have occlusion of the pancreatic duct accompanied by fatty degeneration of the pancreas. The liver and biliary apparatus in both cases [illegible] healthy.

From these cases he suggests the theory, t[illegible] the formation of the coloring matter of the fæ[illegible] hydrobilirubin, depends not upon the bile al[illegible] but upon the mutual reaction of the bile [illegible] pancreatic juice upon each other in the intest[illegible] canal.

Secondly, that a deficiency of pancreatic j[illegible]

will equally with a deficiency of bile, produce clay-colored stools. Thirdly, that, as hydrobilirubin is that part of the biliary products excreted in the fæces, and that as its formation depends on the pancreatic secretions, so the pancreas plays an important part in the excretion and absorption of bile in the intestinal canal.

Dr. Walker then pointed out that these views if accepted, would explain the hitherto inexplicable cases where there was no evidence of arrest of the bile secreting functions of the liver, and where no obstruction to the outflow was present, but when clay-colored stools persistently existed. It also served to explain, if accepted, the discrepancies between the clinical observations that certain drugs, calomel, for instance, produce bilious stools, and the physiological observations that these drugs have no influence on the secretion of bile by the liver. In the discussion which followed Dr. Harley drew attention to the fact that several well-authenticated cases of colorless bile had been reported, and that the cases reported might depend on this fact. Dr. Walker, moreover, pointed out, that at the necropsy, in both cases, ordinary bile was found in the gall bladder. Dr. Walker's paper certainly opens up a new field for clinical observation; but I think that two cases, however well marked, scarcely furnish sufficient foundation on which to base so radical a change in our views on the pathology of clay-colored stools. Still, an important point has been raised, which, I feel sure will be well worth receiving some attention at the hands of our Canadian practitioners.

R. Adam Walker.

34 Harrington Square, N. W.,
London, April, 10th, 1889.

Selected Articles.

COMPLETE OBSTRUCTION OF THE COLON SUCCESSFULLY RELIEVED BY USING SENN'S PLATES—A PROPOSED SUBSTITUTE OF CATGUT RINGS.

BY ROBERT ABBE, M.D.

It has been with pride and gratification that surgeons here and abroad have watched the zealous and tireless energy of our countryman, Dr. Nicholas Senn, in his experiments to determine the value of certain expedients in rendering safe and sure the repair of injuries of the intestines.

After reading the published account of his experiments detailed in the "Annals of Surgery" for the current year, I doubt not most of us felt convinced that an important help had been rendered to the understanding of the action of repair and the assistance we might advantageously give. Without making extravagant statements, Dr. Senn offered one device for use in the restoration of the intestinal canal when complete obstruction had occurred that, it may be hoped, will replace the tedious, difficult, and frequently fatal operation of circular enterorrhaphy—namely, the approximation plates of decalcified bone. Whether it be in chronic obstruction, from neoplasms or stricture of the bowel, or in acute injury of the

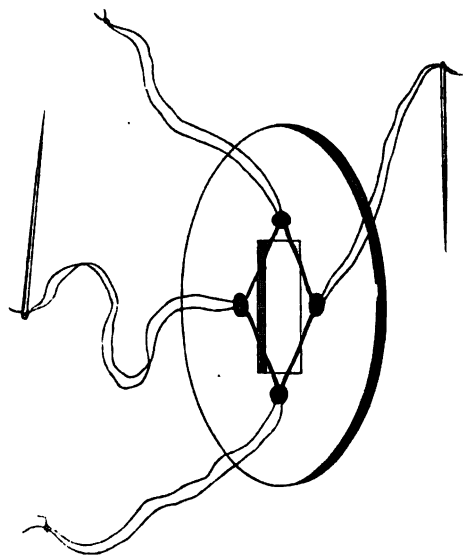

Fig. 1.—Senn's approximation plates.

intestines from laceration with its accompanying shock, the vital condition of the patient is never so good that one does not fear for the result, especially if the shock of an operation is added, which in most experienced hands, cannot be completed in less than from an hour and a half to two hours and a half.

We welcome, then, a method that with greater certainty and less shock completes, in from a quarter to a third of the time, the coaptation of openings made in the bowel on either side of the obstruction, and establishes a continuous intestinal canal. Such a work is accomplished by Senn's plates. The principle is not entirely new, but its successful application had not been demonstrated until his experiments upon dogs put it upon a working basis. How far it can be relied upon in man has yet to be proved.

The principle, briefly stated, is to substitute for the tedious stitching of the lips of two longitudinal

openings in adjacent portions of intestine a compression of those edges between two discs of bone placed within the bowel and tied tightly to each other, thus bringing about adhesion by approximation. The bone plates dissolve away in the course of time.

He found, in repeated circular suturing of the divided bowel in dogs, that a large proportion of them died from accidents to the sutures or from shock, while with approximation plates the results were uniformly safe, speedy and successful. The method appeals to one's mechanical sense, if I may so speak, as eminently rational.

The patient whose case I will now narrate illustrated strikingly the adaptability of this method to certain cases:

He was a man, sixty years of age, of large build, though not fat. He had always followed the sea.

In November, 1887, I operated on him for three large hæmorrhoids, which had followed an increasingly constipated habit resulting from his abandoning the sea and leading a more sedentary home life. For four months prior to this operation he had much abdominal distress, flatulence, and distension, which occasionally culminated in severe cramps, followed by offensive fæcal discharges and relief. Such attacks occurred about monthly.

The last attack produced severe syncope. He had a fair appetite, but a heavily coated tongue. Urine, 1·023; no albumin; no sugar.

A free purgation brought away large fæcal movements, and the abdomen became flaccid.

In April last, four months after the operation for hæmorrhoids, he returned to the medical service of St. Luke's Hospital. Masses of a solid nature could be felt through the abdominal wall, slightly raised and shifting position from time to time. No immovable or very hard masses could be distinguished. The lower portion of the abdomen was prominent while the upper was relatively flat. The superficial abdominal veins were enlarged. Glands could be discerned in the right groin. There was some œdema of the legs, with varicose veins. Up to the time of the operation for hæmorrhoids he had been having a movement of the bowels of fair size on alternate days. Of late this interval had increased to four or five days, and then a movement took place only after violent cathartics.

In spite of physic, he became restless, vomited, had foul breath, and grew weaker; the voice became very faint, and the abdomen showed dullness and resistance down the right side over the cæcum and colon.

Some days later a sharp colic was followed by a stool with some relief. Then, after the use of podophyllin for some days, he had large movements and felt well again, so that he was discharged cured in June last.

He was again admitted September 5th, in a worse state than before. He was treated by Dr. Kinnicutt for three weeks. The obstruction had become complete, and, though many of the severer purgatives were given, no movement was brought about except what was brought away by enemata. The abdomen was greatly distended and getting worse daily. Dull masses were felt in several

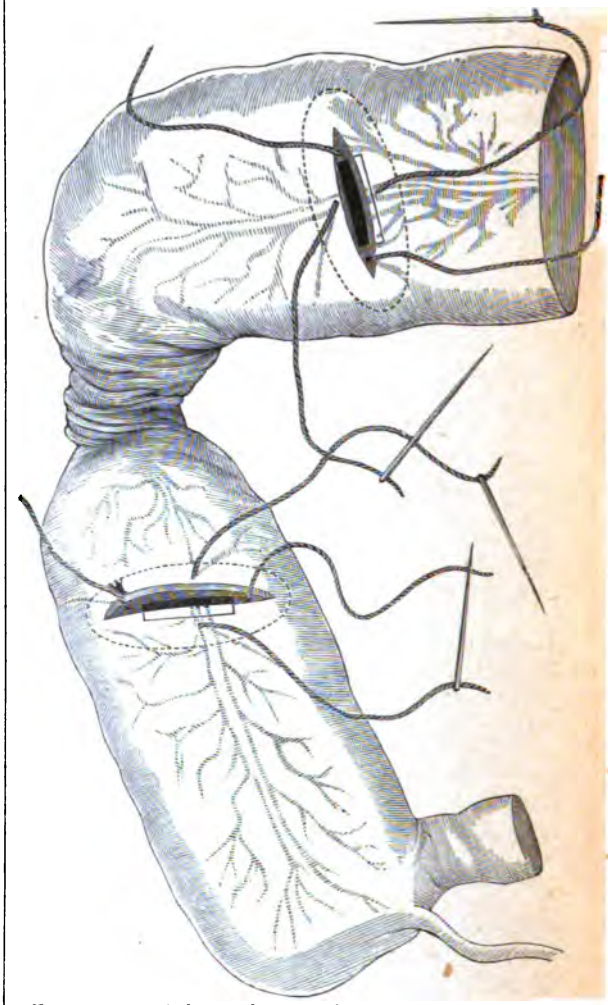

FIG. 2.—Senn's bone plates applied to colo-colostomy before tying together.

places. Intestinal colic was severe. He grew apathetic, lost appetite, and became sallow. His pulse grew weaker and prostration greater. Partial syncope occurred from time to time.

The obstruction had become absolute, and when he was transferred to my care he was wasted away in face and body, but presented a very large abdomen. A few hours before operation he suffered complete syncope from pain and exhaustion, and it was thought by some who saw him that he would scarcely endure transfer to the operating room. Judging from his thready pulse, shal-

breathing, and complete exhaustion, it appeared to me that he could not have survived many hours without relief.

Under these circumstances, I opened the lower part of the abdomen, November 14, 1888, under cocaine anæsthesia, by a four-inch incision above the pubes, the patient seeming almost moribund, but feeling no pain. A pint of clear fluid escaped from the abdomen, and I found, on exploration with two fingers, an enormously distended intestine occupying the right half of the abdomen, which I judged to be not less than eight or ten inches in diameter, and which could be nothing else than the cæcum and ascending colon. Other coils of intestine within reach were distended to their utmost and felt semi-solid with fæces. None that I could touch seemed less than two inches and a half in diameter.

I at once decided to relieve the bowel through the wound, and therefore sutured the surface of the cæcum to the parietal peritonæum in the centre of the wound and closed the abdominal cavity by suturing the ends of the incision. Then passing two loops of heavier silk through the entire thickness of the presenting portion of gut, I cut between them a free opening, and by these loops dragged up the cut edge and held it firmly during the subsequent evacuation, and ultimately stitched it thereby to the skin. A torrent of liquid and solid fæces and gas continued to pour out of the opening for ten minutes or more. The stuff had mingled in it innumerable foreign articles, such as fish-bones, some of them an inch and a half long; cherry-pits, grape and melon seeds by the hundreds, and large fragments of bones of the size of one's finger nail; also scraps of oakum and yarn and some wood shavings and calculous masses. All of these were blackened by long residence in the bowel. I supposed these must have been swallowed to overcome constipation, but this he denies, and it must be supposed that they were swallowed in the ordinary habit of rapid eating.

As soon as the over-distension with gas and fluid had been relieved, the man began to rally from his shock. His deep breathing, restored pulse, brightened countenance, and lively interest in the procedure assured us of his recovery. A loose receptive dressing was applied, and fæces continued flowing for hours. A moderate estimate of the ount passed would be twenty-five or thirty nds.

is convalescence was immediate and complete. temperature record ran but little above nor- . He soon began to eat ravenously, and in weeks he had a manageable artificial anus ough which he had two daily movements. A al enema was now given to locate the stricture. ee quarts of warm milk could be introduced, one appeared at the wound. An enema-tube e passed up to the left hypochondrium. By an injection downward through the artificial anus not more than three pints could be introduced; the inference was, therefore, inevitable that the obstruction was somewhere near the hepatic flexure of the colon. No hardness could be felt in the abdomen to locate the trouble.

Six weeks after this relief he was ready to have an operation done to overcome the stricture. On November 14th, having prepared him by preliminary catharsis and restricted fluid diet, I operated with the assistance of Dr. B. Farquhar Curtis. The artificial anus was closed by a plug, and rubber cloth secured over it by a broad adhesive strip. An incision was made in the right hypochondrium four inches and a half long parallel to and a hand's

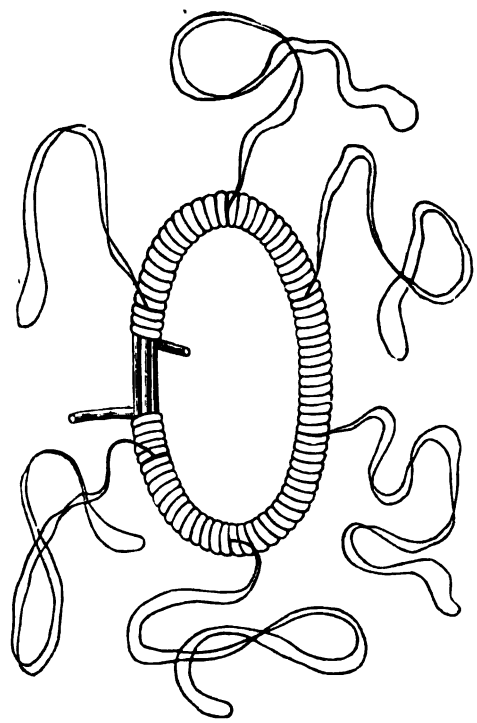

FIG. 3.—Apposition ring of catgut.

breadth from the median line. The ascending colon appeared and was traced down to the lower wound, thus identifying the site of the artificial anus in the caput coli. Tracing it upward, the obstruction was at once felt and seen. It was a hard mass, apparently a neoplasm, not larger than a small egg, which took in the whole circumference of the colon at its hepatic flexure. It was fixed in the loin so that it could not be raised. To have attempted its removal would without doubt have been fatal. I therefore brought together the ascending transverse colons, as they lay very naturally side by side, and selected a point favorable for junction about four inches from the stricture. I then surrounded the gut a short distance beyond

this by a strip of iodoform gauze passed through the mesentery and tied. A cut was then made an inch and a half long across one of the longitudinal bands of the colon, and into the bowel was slipped the bone plate, the needles holding the side sutures of silk piercing the entire wall of the gut at the longitudinal band. The same being repeated in the opposing gut, the parts were cleansed with boro-salicylic solution. The four sutures were then tied tightly and, as sugsested by Dr. Senn, about four additional Lembert sutures of fine silk were taken in the serous coat just outside of the edge under pressure between plates. The coaptation seemed quite perfect without these, but, as the surface of the colon was not absolutely smooth, I thought it best to take them. The parts were again cleansed and returned to the cavity and the abdomen was sutured.

The patient's recovery was uninterrupted by pain or fever. On the third day a little wind passed the bowel. On the eight a small piece of fæces of the size of a peanut escaped, greatly to the delight of the patient. Some fæces were allowed to come out of the artificial anus daily, but some came from the bowel also. On the tenth day a good, consistent movement took place *per rectum*—of small caliber, however. At two weeks a much better one occurred. The artificial anus was now completely plugged, and everything passed by the bowel. For the first month every movement but one was scrutinized for traces of the plates. That one was urgent, and the patient went to the water-closet unattended. Nothing has been seen of plates or threads. It is nearly eight weeks since the operation. The patient is already growing more fleshy than for years past, has good daily stools, and has been free from pain in his convalescence.

There remains yet a small fæcal fistula into the cæcum which can be plugged by a lead-pencil, the pad on which is changed twice each week, and from which nothing escapes as he walks about. I shall soon close this by dissecting it out, suturing the inverted edges, and dropping it back into the abdominal cavity.

I should have mentioned that before the recent operation, the patient had five per cent. of albumin in his urine, and it was specially desirable not to subject him to a long operation..

The bone plates that one can secure from the makers seem to be limited in size, so that an aperture between two intestines of an inch and a half is about the largest that can be obtained. While this may suffice for operations on the small intestine, it would seem desirable that the larger should have an aperture proportioned in some degree at least to its diameter to insure its not being blocked.

On endeavoring to obtain larger plates from Dr. Senn's instrument-maker, I found it took many days to prepare them, and that the largest scarcely made more of an opening than the smallest, while the disposition to warp and not coaptate so well seems to increase as the plate is made larger. It occurred to me that a ring might be composed of the heaviest catgut quite as absorbable and as firm as the softened bone. It can be made in a few minutes of any desired size, as shown in the cut, and thus are obviated the serious delays of sending to cities or special instrument-makers for the bone plates.

The preparation of decalcified bone plates involves two or three days' maceration in dilute 10-per-cent. hydrychloric acid, then washing half a day, and compressing between blotting pads with flat pieces of tin on either side until quite dry, which is a slow process at best. They warp if not tightly compressed. An oval opening has then to be cut or drilled in the plate, as well as openings for threads. Finally, threads have to be secured, by a scheme not easy to carry out, which connect each with the other.

If the plates are not at hand for use, the making of them would be a serious delay, and any effective substitute easily made will be welcome. The rings which I recommend for this purpose are made of the heaviest catgut softened in hot water until it ceases to twist upon itself. It is then formed in a ring of four strands on the ends of three fingers, and wound over and over with the same sized gut tightly applied. When completed, it is, as you see, stiff and flat, with no disposition to curl. The threads are quickly and simply adjusted around the ring and insure its making a firm pressure until it has dissolved in the bowel. The ring, if made to encircle the ends of four fingers, will be competent to establish a large opening in the colon. Such a ring will need more threads attached, and to this I can see no abjection. Six threads for the largest ring would give an intervening space of three-quarters of an inch. (See Fig. 3.) Each thread can be armed with its own needle, or a cambric needle threaded with a loop of silk can be used to pull each successive thread through the intestinal wall about a quarter of an inch from the margin of the opening. There is every advantage in thus giving each thread a secure hold on the margin. The elasticity of the ring, resuming somewhat its oval shape and holding the edges of the wound apart during healing, insures against two accidents which in experiments have occurred with plates: 1st, the partial closure of the orif and 2d, the blocking of the opening in the pl This is directed to be made only five-eighths of inch long by a sixth of an inch wide, though in set furnished me it is three-quarters of an inch a quarter of an inch—a size still too easily structed. In three of Senn's experimental ca this aperture was found to have been blocked food or hair or a fragment of bone, which wo not have occurred had a ring been used.

To prove the efficiency of this catgut apposition ring, I operated on January the first on a large dog. Having divided the gut and sutured the inverted ends to complete closure (thus imitating stenosis), I re-established the canal by lateral apposition with rings.

I inserted four additional Lembert sutures to re-enforce fixation. The dog continued as lively after this as if nothing had happened, ate well, and defecated often. Nine days later I etherized him and excised two feet of the bowel to include the operated part, and then reapplied plates after suturing the ends as before. The anastomosis was perfectly established and the rings had been dissolved away.

The intestine was pervious to water, but there occurred a matting together of adjacent coils that was reparative to an extreme degree. The involved parts were securely buried in the mass. On the proximal side the gut was distended to nearly twice its calibre, owing to the partial obstruction of the twisting coils, as well as to the smallness of the aperture. I confess to a little disappointment in finding such an amount of contortion of the gut, and think it might have been better had I laid the gut not side by side with ends together, but with ends looking in opposite ways. Then the peristalsis would have been in the same direction for both parts.

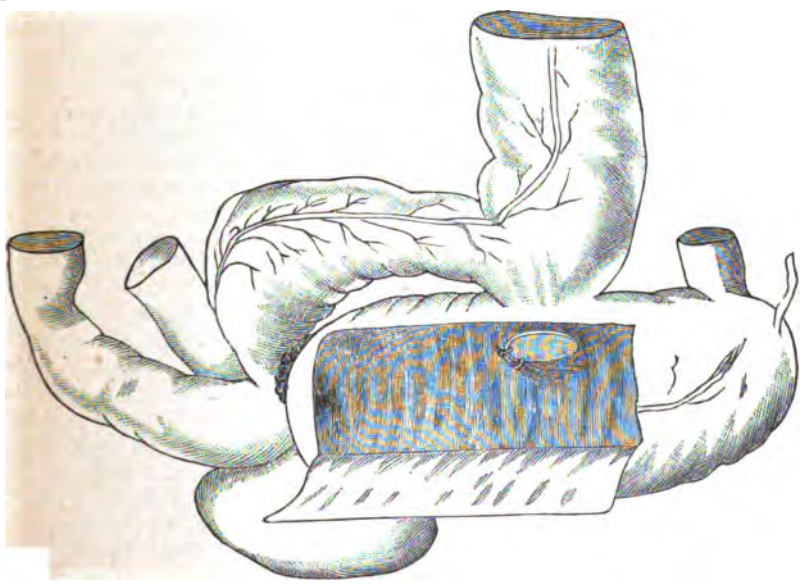

FIG. 4.

.ine days after the second use of the catgut ›osition rings, the dog having enjoyed excellent ·lth and defecated freely, I killed him, and ıd the second beautiful specimen, which I show ɛ with the first. The anastomosis between the ·ally apposed gut is perfect, the union very solid, the rings dissolved and gone. Two of the silk ligatures still clung to the edge of the orifice, but would soon have worked out as the others had. The function of the gut was therefore restored admirably by this simple and quick procedure.

The cementing of apposed serous surfaces by plastic exudation during the first six or eight hours is, as Senn has shown, sufficient to hold the parts together, but at forty-eight hours union is so firm that severe internal pressure will not part the wound. The scratching of apposed serous surfaces with a needle-point before approximation, while not essential, is, as he has shown, the best method of promoting speedy organic union between them. I resorted to this in the second experiment. Senn has recently put on record four successful cases of gastro-enterostomy by plates, done by him within a year past. He writes me that there are a few other instances of its application by Dr. Fenger, Dr. Hunter, and others, but these are, I believe, not on record. It is evidently a method that appeals to the practical surgeon, and will unquestionably find greater favor every day.

My experiments indicate that the apposition rings of catgut may prove a valuable substitute. They are quickly and easily made, readily applied, and have the advantage of encircling a much larger aperture than the bone plates. This last feature obviates the distrust one feels in a small aperture of anastomosis, which must inevitably contract somewhat as time goes on.

As advocated by Senn, a few Lembert sutures should be applied outside the plates. This rule applies to the use of the rings also, and by the combination the apposition is proof against internal pressure.

NOTE.—Just before the publication of this paper the patient died of a peculiar accident, and has given an early display of the efficacious work of the plates. More than three months after the operation he had reached the height of convalescence, having better health than for many years, his movements being regular and his appetite hearty. He was suddenly seized with a painless diarrhœa that baffled treatment. For three weeks he became emaciated with unusual rapidity, and died exhausted. The post-mortem examination (see Fig. 4) revealed an adhesion of the duodenum, four inches from the pylorus, to the small knot of cancerous stricture of the colon, and secondary ulceration through it; so that all food passed directly from the

duodenum into the colon, thus excluding the entire small intestine from its function. The artificial aperture shown in the cut still had the tangled threads attached firmly. The bone plates had long been dissolved away. The pelvis of the kidney was adherent to the hepatic flexure of the colon at the diseased point.—*N. Y. Med. Jour.*

ON THE MECHANISM OF THE CARDIAC BRUITS OF CHLOROSIS.

We have now to consider a murmur long familiar to clinicists, but of which a new interpretation has of comparatively recent years attracted attention. I refer to a systolic murmur heard in the second left interspace. The old belief is that such a murmur is formed in the pulmonary artery as a result of anæmia. Certain it is that such a murmur is of common occurrence in anæmic cases, that it is the predominant or only murmur present, and that it in no way indicates structural disease of the heart or its vessels. The new interpretation of this long familiar murmur is that it is really the murmur of mitral regurgitation, the incompetence resulting from impaired nutrition of the heart-muscle. Anatomically, we know that the appendix of the left auricle curves round the left side of the pulmonary artery to reach the front in the second left interspace. In cases of mitral stenosis in which great dilatation of the auricle had taken place we admitted that a systolic murmur was rarely to be heard over a pulsating area to the left of the sternum in the second interspace. But "in the absence of any great or well-marked auricular dilatation," such as one expects in mitral stenosis, it is alleged that a murmur audible in the second left interspace may own a mitral reflux origin. This view was set forth by Naunyn in 1868, and in confirmation of it he stated that the maximum intensity of the murmur was not over the pulmonary artery, but "an inch, or an inch and a half, or more, to the left of the left edge of the sternum," over the situation of the appendix of the left auricle. It seems to me that "an inch and a half, or more," is too far out for the situation of the appendix of the auricle, especially when it is dilated, and possibly partly covers the pulmonary artery. Dr. Balfour's statement seems to be more in accordance with anatomy, if the murmur is auricular, when he speaks of there being "a space between the stethoscope resting on the position of maximum intensity (of the murmur) and the left edge of the sternum equal to at least, the breadth of the tip of the middle finger." Granting, for the moment, that the maximum intensity of the murmur is outside the pulmonary artery, and therefore, presumably, over the auricular appendix, it has still to be associated with the familiar forms of mitral regurgitation, revealed by a systolic apex-murmur. It is alleged that when the ordinary apex-murmur exists, it is frequently accompanied by a similar murmur in the second left interspace, usually, however, of less intensity but occasionally of greater. We are next asked to believe that a reflux mitral murmur may be audible only in the second left interspace in the situation of the left auricular appendix, and finally, that the murmur which has so long been familiar to us as occurring in cases of anæmia, is not produced in the pulmonary artery, but is, in short, a murmur of mitral reflux mechanism, the incompetence of the valves depending on defective muscle-adaptation, the result of malnutrition of the cardiac substance.

Let us turn, for a moment, to the natural history of the old-fashioned murmur of anæmia, leaving the question of its precise position of maximum intensity out of consideration. Before the occurrence of this murmur, venous hum in the neck has usually been present; probably, in all cases. Again, after the development of the second left interspace murmur a similar murmur becomes audible over the aorta.

Finally, but only when the anæmia has reached a very high degree, a murmur is developed at the apex of the heart. On recovery, it is known that the abnormal soniferousness of the circulation disappears in exactly the reverse order when all the murmurs have been present. Thus the apex murmur first disappears, then the arotic murmur, next the murmur in the second left interspace, and finally the venous hum in the neck. This is the statement of clinical experience, although it must be admitted that there seems to be some other factor in the production of the murmurs in question than the mere degree or duration of the anæmia; for two cases of apparently equal severity may differ greatly in the readiness with which they develop murmurs.

I have chosen this place to make a few remarks on the causation of murmurs, without some ideas on which the interpretation of these signs would, of course, be impossible. The theory which of late years has received most acceptance is that originally advanced by Sir Dominic Corrigan, in 1829. He showed that "when an artery is pressed upon . . . . the motion of the blood in the artery immediately beyond the constricted part (looking from the heart) is no longer as before. A small stream is now rushing from a narrow orifice into a wider tube, and continuing its way through surrounding fluid. The rushing of the fluid is combined with a trembling of the artery, and the sensation to the sense of hearing is the "bruit de souffle." Till lately, Corrigan's views gained little ground, the friction theory which explained the production of murmur by friction "between the blood and the surface over which it passes" being generally received. In 1858, however, Corrigan's theory was again advanced by Chauveau of Lyons, who experimentally

proved that roughness of the surface over which the blood flowed would not account for murmur production. He confirmed Corrigan's theory, stating that the "bruit de souffle" is produced by the vibrations of the "veines fluides," which are always formed when the blood passes into a part of the circulatory apparatus actually or relatively dilated. We have here to do only with mitral murmurs, and for the obstructive kind of these the theory answers admirably, accounting well for the conduction of the presystolic and diastolic murmurs to the apex. In the case of the regurgitant mitral murmur, we can readily understand "veines fluides" being produced in the left auricle, but some additional explanation is needed to account for the transmission of the murmur to the apex. The late Dr. Hilton Fagge gave a most satisfactory one in the following words. Speaking of the experimental researches of Bergeon, he says: "One has only to provide the tube at the seat of constriction with a lip or rim projecting backward into the stream, and a second murmur is at once generated, which is heard behind the obstruction. A cul-de-sac is formed, and the fluid which occupies this receives the shock of the onward current, and is thrown into sonorous vibrations." He adds: "The incompetent valves project backward into the blood stream, exactly like the lip or rim employed by Bergeon."

To return now to the murmurs met with in anæmia, we have found that there may be (1) a continuous hum in the veins of the neck; (2) a systolic murmur heard in the second left intercostal space; (3) an aortic systolic murmur; and (4) an apical systolic murmur. They develop in the order mentioned, and disappear in the reverse order. How shall we interpret these murmurs? The venous hum is no doubt produced by the formation of "veines fluides," for, as Dr. Fagge wrote, "The lower ends of the jugular and subclavian veins on each side are adherent to the deep cervical fascia, and therefore cannot collapse, so that this venous ampulla, as it has been termed, affords the conditions necessary for the generation of 'veine fluide,' whenever the blood stream in the jugular vein above is narrowed, whether by simple adjustment of its calibre to the diminished volume of the blood in anæmia or by pressure of the stethoscope, or by both." With reference to the second left interspace murmur of mia, I have found its position of maximum in- ity to correspond with the situation of the ionary artery rather than with that of the endix auriculi, supposing the latter to ap- ach the surface which it very seldom does, and here to the old view, that the murmur is pro- d in the pulmonary artery. No doubt "veines les" are formed at or rather beyond the pul- ary orifice, as in the venous ampullæ at the the neck, although the mechanism of their formation is not very clear. If we evade the difficulty of the explanation by accepting the auricular regurgitant theory, we have still to reckon the aortic murmur, which it seems to me that the advocates of the auricular view of second left interspace murmur rather ignore. On the other hand, if we hold that the murmur is produced in the pulmonary artery by the formation of "veines fluides" the explanation is as applicable in the case of the aorta, as of the pulmonary artery. For some reason, however, the condition necessary for the formation of "veines fluides" arises in anæmia more readily in the pulmonary artery than in the aorta, but the two phenomena are no doubt essentially the same in kind. The apex-murmur must, I think, be placed in a different category. I believe it to be a murmur produced by mitral incompetence from muscle failure, and we must bear in mind how the anæmic state intensifies murmurs, even of organic origin. There can be no question of the fact that anæmia not unfrequently gives rise to very considerable dilatation of the heart. In explanation, it has been supposed that there is high arterial tension. This may be so in some cases, but in a larger number the blood tension is low. Even if high arterial tension did exist, it would not account for dilatation of the left ventricle, provided that this chamber was habitually able to complete its systole, and the mitral valves remained competent. On the other hand, we know that organic lesion of the mitral valves, rendering them incompetent, induces enlargement of the left ventricle, and the reason, of course, is that the intra-ventricular pressure is increased during diastole. With each contraction of the ventricle blood is driven backward into the auricle, as well as forward into the aorta, but if the circulation is to go on as before the lesion, the auricle must pass on to the ventricle the regurgitated blood, as well as its normal delivery. There must follow excess of intra-ventricular pressure during diastole, and consequently enlargement of the chamber. If, then, we regard the apex-murmur of anæmia as a mitral regurgitant murmur (and I think we are bound to do so), the significance of the murmur becomes immense, for not only do the dyspnœa on exertion, the palpitation, and the dropsy of the lower extremities characteristic of anæmia acquire a fresh interest, inasmuch as it is impossible to determine how far mitral reflux is a factor in their production, but we know by its presence that the condition which makes cardiac dilitation sooner or later inevitable is established. I plead, therefore, attention to the heart in anæmia, and I would urge the importance of rest in the treatment of all severe cases

Accentuation of the pulmonary second sound and tricuspid regurgitant murmur occur in cases of mitral regurgitation as in those of mitral obstruction, but as they present no special features,

I have not thought it necessary again to allude to them.—Dr. Graham Steele, M.R.C.P., in *Med. Chron.*

MEDICAL NOTES.

In a case of *post-hemiplegic chorea*, Prof. Bartholow directed five drops of the fluid extract of gelseminum *ter die.*

The long-continued *use of hot water* as a drink is injurious, bringing about atrophy of the gastric glands. (Prof. Bartholow.)

In the treatment of the *laryngeal complications of phthisis*, Prof. Da Costa advises the insufflation of iodoform or application of cocaine.

In the treatment of *fetid bronchitis*, Prof. Da Costa recommends full support, cod-liver oil, and carbolic acid, both by inhalation and internally.

Never give *mercury in syphilis* before secondary symptoms occur; you only mask these symptoms and are unable to ascertain the severity of the case. (Prof. Gross.)

In a case of *inflammation of the patellar bursa*, with accumulation of fluid, Prof. Gross tapped the sac by a trocar, removed the fluid and injected twenty drops of pure carbolic acid.

When ordinary remedial measures fail to arrest *hemorrhage of the lungs* in a reasonable time, Prof. Da Costa recommends sulphate of copper in $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$ gr. doses, or tinct. matico, f℥ ss-j every four hours.

When using the alkaline treatment for *acute rheumatism*, during which anæmia or relapses are liable to occur, give quinine from the middle of the attack and during convalescence to obviate these conditions. (Prof. Da Costa.)

In the case of a lady having *pseudo-angina pectoris*, Prof. Bartholow directed the administration of trinitrin (nitro-glycerine); cut off alcohol and fat-forming foods from the diet, and also ordered liquor potassii arsenitis, gtt. ij. t. d.

For *after pains* of labor, Prof. Parvin advises, if treatment be necessary, the following:

℞ Opii pulv., ... gr. ss
Camphoræ, ... gr. j. M.
Ft. pil. j.
Sig.—Every hour till relieved.

In the treatment of *chronic alcoholism*, Prof. Bartholow says: For the disorders of digestion, morning vomiting, loss of appetite, accompanied by wakefulness and nervousness, the appropriate remedies are abstinence, careful alimentation, and such tonics as quinine, nux vomica, and the administration of bromide of potassium to procure quiet sleep. In the more chronic cases, where degenerative changes may be expected to have taken place, arsenic in small doses, hypophosphites and cod-liver oil are recommended, and should be given for several months. Chloride of gold and sodium or corrosive sublimate will retard changes taking place in the connective tissue, if given early enough.

As an application to *papular eruption of syphilis*, which is often prominent on the face, Prof. Gross directed the following on exposed parts of the body:—

℞ Hydrarg. oleat., 5 per cent., . ℥ j.
Ol. rosæ vel gelsemii, . . . gtt. j. M.

As a stimulating wash to *chancroids*, the following may be used:—

℞ Acid. tannic.,
Extract. opii aquos., . . āā gr. ij.
Cupri sulph., ... gr. $\frac{1}{8}$
Aquæ destillat., ... f ℥ j. M.
Sig.—Apply locally. (Prof. Gross.)

As a *covering for small wounds*, Prof. Forbes uses at the Jefferson clinic:—

℞ Olei ricini, ... ℥ iv.
Collodii, ... ℥ j.
Hydronaphthol, ... 10%. M.
Sig.—Apply locally.

For *secondary syphilis* in broken down subjects, Prof. Gross advises:—

℞ Pil. Hydrarg., ... gr. ij.
Quiniæ sulphat., ...
Ferri sulph. exsiccat., . āā gr. j.
Pulv. opii, ... gr. $\frac{1}{4}$ M.
Sig.—One to be taken after each meal.

—*Col. and Clin. Record.*

THE ETIOLOGY OF CRUPOUS PNEUMONIA.

In a paper read by Dr. Geo. M. Sternberg, on the above subject, before the Med. Soc. of the State of New York, he brought forward the following facts:—

Acute pneumonia is now considered by the best authorities as an acute specific disease, one in which there is something special in the inflammatory process. The object of the author is to bring forward the history of the experimental evidence which bears upon this view of the etiology of the disease. The microörganism of the disease is widely diffused and is probably not acquired by personal contact. The disease may occur, however, as an epidemic in prisons or barracks, in villages or in single houses, just as is the case with cholera or yellow fever. The cases may bear no special relation to each other, however, but simply have a relation to a common environment, like exposure to cold, alcohol, etc. The disease prevails over a wide area of the earth. Its direct transmission to those who are brought in contact

with it, as attendants upon the sick, is probably of very rare occurrence The specific microörganism is found in the buccal secretion of healthy individuals. It might be objected that this makes the argument concerning its pathogenic character untenable, but with our present knowledge this does not follow, for pus cocci, also the cocci of tetanus, are found among the healthy, but produce disease only under certain conditions. Traumatism is one of the essential factors to the production of this disease, the bacillus being also a component factor, and it is necessary that it be introduced into a favorable location, there being a wide difference in the susceptibility of the tissues to invasion. Other factors may be reflex vasomotor paralysis of a part of the lung, which enables the microbe to do its work, also many changes in the cocci themselves which may change their pathogenic activity.

The coccus of pneumonia was described in 1882 by Friedländer, and the same year by Leyden and Gunther. Matri published observations in 1883; and the same coccus was also found by him and others in different diseases. In 1882, Friedländer described the results of his experience with blood cultures, upon which the fact of the oval pneumococcus was established. Talamon also described to the Anatomical Society of Paris, in 1883, a few days after Friedländer's paper was read, a lanceolate coccus which he obtained from pneumonic exudate after death, or from blood drawn during life. He produced genuine lobar fibrinous pneumonia with pleuritic and pericardial complications with it in rabbits. This coccus is not identical with that which was discovered by Friedländer, but with one which was discovered by the reader from his own buccal secretions in 1880, and which was named by him *micrococus Pasteuri*. He inoculated rabbits with it at that time with fatal results, but did not discover that his coccus differed from that of Friedländer until 1885. Fränkel found that the coccus of saliva (M. Pasteuri) more frequently caused pneumonia than that which was obtained from rusty sputum.

Weichselbaum's *diplococcus pneumonia* is also found to be a more frequent cause of pneumonia than is that of Friedländer. Gamaleia concluded from extensive experiments in mice, and also from a review of the entire subject, that pneumo- is *usually* caused by the *micrococus Pasteuri*.

e author believed that many reports concerning micrococcus of Friedländer should be credited he *micrococus Pasteuri*; for the two are enly dissimilar as is shown by staining, Gram's hod resulting in a discoloration of the former, not of the latter.

xperiments which have been performed with *micrococcus Pasteuri* upon dogs and sheep e also described. The disease which was pro- in them was far less fatal than in mice, showing far less susceptibility to its virulence. In this respect pneumonia in dogs and sheep is similar to that disease in human beings. The probability is that in these higher animals the coccus does not invade the blood extensively. The author's early experiments, which were abundantly verified and published before those of the others mentioned, entitle him to the credit of the discovery of this microörganism.

Pulsating Pleurisy.—Forty-two cases of this extremely rare condition have been collected. It is almost invariably met with on the left side. In only three instances was the fluid on the right side. Empyema existed in all the cases with the exception of one, in which the fluid was serous. There was pyopneumothorax in five cases. Two groups may be recognized. (1) The intra-pleural pulsating pleurisy. (2) The pulsating empyema incessitatis, in which there is an external pulsating tumor. The latter condition occurred in twenty-five of the forty-two cases. The external tumor is usually single, but in five cases there were two, and in one case, three tumors. The perforation of the pleura usually occurs on the anterior aspect of the chest, from the second to sixth rib, sometimes close to the sternum. In three cases the tumor appeared posteriorly at the spine, at the angle of the scapula, and in the lumbar region. The pulsation in the intra-pleural cases is usually in the antero-lateral region of the affected side, and is only evident on palpation. Pulsating pleurisy usually occurs in cases where the fluid has existed for some time. Various explanations of the phenomena have been offered. Broadbent believed it to be due to adhesions between the layers of the pericardium, and between the pericardium and chest wall, but this explanation cannot hold good for those cases, which showed the non-existence of adhesions at the autopsy. Traube regarded the destruction of the costal pleura and paresis of the intercostal muscles as the conditions necessary for its occurrence. Bouveret, in a recent monograph, maintains that the pulsation is met with wherever the resistance of the thoracic wall is greatly reduced, or when the resistance on the part of the diaphragm is heightened, as by a deposition of a thick layer of fibrin. A certain degree of pressure is necessary, inasmuch as the pulsation will at once cease, when only a small quantity of fluid is removed. Comby believes that the pulsation only occurs when the lung is compressed, and adherent to the pericardium, thus allowing the cardiac movements to be communicated to the thoracic wall. Cases of pulsating pleurisy have been mistaken for aneurism, and the situation where the pulsation usually develops, renders the error pardonable. A fine hypodermic needle will readily make the differen-

tial diagnosis. The prognosis of this affection is not very favorable. Of the thirty-eight cases collected by Keepler, seventeen died. It must be remembered that most of these cases occurred before the days of safe operations upon the chest wall. Complete evacuation of the fluid with free and permanent drainage, meets the indications for treatment.—Prof. Osler, in the *Am. Jour. of Med. Science.*

ACUTE GONORRHŒA TREATED BY A NEW METHOD WITH SUCCESS.—H. J. had impure connection four days before he applied to me for relief. His symptoms were those of acute gonorrhœa, the disease having been considerably aggravated in consequence of his having been drinking heavily both before and since he contracted it. The yellowish-green discharge from the urethra was abundant, he suffered severely during micturition, and there was great tenderness along the whole course of the penile urethra. The night before he came to me he was obliged to rise five times to pass water. He had the disease seven years ago, and was then under treatment for about two months with a medical gentleman in this town, who gave him copaiba. The line of treatment adopted in this case was by the introduction into the urethra of medicated bougies, and the medicament consisted of sulphate of thallin of five per cent. strength.

Before introducing the bougie I made the patient micturate, in order to clear the urethra of discharge, and I then passed the bougie up to the ring, and directed him to hold the meatus quite close, so that none of the application could flow out as it melted. I kept him lying on his back for twenty minutes, at the end of which time I withdrew the spring and closed the meatus with cotton-wool. During the time the bougie was in the urethra he complained of smarting pain, but after I withdrew the spring he said the pain ceased entirely, and he expressed himself as feeling comfortable. He introduced one every evening after this, following carefully the directions I gave him; and on the third day after he had been with me he called to say he was quite cured, having no discharge of any kind, and no pain on passing water. The day following happened to be his busiest day in the week, as he had to work to 12 o'clock at night, and be on his feet the greater part of that time. In consequence of this he could not use his bougie that day at all, and on the next morning there was a slight return of the former symptoms; but he began anew his treatment, and after using two more bougies, was again perfectly cured. He has remained so since, although he has undergone the heavy day of the week which caused him to relapse before, and this time with impunity. No bad after-effects of any sort resulted from the treatment.—Dr. McCaw in *Dub. Jour. Med. Sci.*

JABORANDI IN ERYSIPELAS.—The treatment of erysipelas by jaborandi leaves nothing to be desired. Jaborandi is as much of a specific as quinia in malaria. I have tried it in three cases this winter, all of them severe. In one complicated with implication of the buccal and naso-pharyngeal mucous membrane in a pregnant female, where abortion was threatened, its effects were prompt, and the reduction of the temperature and all alarming symptoms immediate. In this case, its alkaloid were given hypodermically with morphia.

I also used it in a case of puerperal peritonitis, where I had reason to believe that erysipelas was the infective principle. The temperature came down very slowly, but the typhoid symptoms were improved immediately. The slow fall of the temperature I attributed to the excessive pelvic exudation, which bulged the posterior wall of the vagina, and pressed the upper part of the rectum firmly against the sacrum. I know the exudation was peritoneal, because in the sitting posture there was dulness and the impulse of fluid given to the hand in the lower part of the abdomen, above being tympanitic, and the dulness changing with posture. It was a primipara, with no history of ascites or œdema previous to her confinement.

Her attendant, a very intelligent practitioner, informed me that there was no fluid to be detected during, or shortly after, her delivery, except what was contained in the uterus.

Of course jaborandi was not the only drug used in this case; morphia, whisky, digatilis, turpentine stupes, hot vaginal injections, and abundance of milk made up the treatment.

I visited her yesterday, March 11, three weeks after her confinement and sixteen days from her first illness, and find all trace of exudation gone, but some tenderness about one of the broad ligaments yet. She is only taking a general tonic now (iron, quinina and strych.) and will soon be able to do her work.—A. G. Osterman, M.D., in *Phila. Med. Times.*

A STUDY OF ANEURISM.—In view of theories as to the causation and origin of aneurisms the clear statement of facts by Dr. Hermann M. Biggs in the *Am. Med. Jour. of the Med. Sciences* in his observations on aortic aneurism is particularly valuable. From an examination of thirty-fou cases which came up in a period of eighteen months he found that this pathological condition is mo common than is generally supposed. The gener condition as to age, sex and position of aorti aneurism (at the point of greatest strain) agree with former statistics, but in only five could syphilitic history be found and only six were alc holic. In the 28 cases of thoracic aneurism, on 11 had shown a history suggestive of aneuri

Death was generally instantaneous, in a few cases hæmoptysis had occurred a few days before, simulating lung trouble. Death occurred not only after exertion but at times during sleep. In 17 of these 28 cases, there had been no symptoms in life marked enough to attract the attention of the patient or to cause them to consult a physician.

The author thinks that too much emphasis has been laid on endarteritis and atheroma as a cause of aneurism. This however, seems very natural judging from former post-mortem examinations. Pathologists agree that it is in the middle or strongest coat of the artery that the first changes may be noticed and the dilatation of the vessel may be gradual or sudden as after a sudden and violent exertion. Syphilis seems to be the most active agent in producing aneurism and this, of course, accounts for the good effects of the iodides. From an examination of the cases Dr. Biggs concludes :—

1. That aortic aneurisms are more frequent than is usually supposed.

2. That rupture of aortic aneurisms and rupture of the aorta together form one of the most frequent causes of sudden death occurring without previous symptoms.

3. That very frequently indeed aortic aneurisms give no signs of their existence, or at least, very indefinite ones until rupture occurs.

4. That the comparative frequency of rupture of aortic aneurism as a cause of death has largely escaped notice, because in this country this class of cases does not often come under observation on the post-mortem table. Death occurs suddenly without previous symptoms, and, without an autopsy, is charged to heart disease or cerebral apoplexy.

5. That syphilis forms a larger and, perhaps, the largest factor in the production of aneurism of the aorta. This disease of the middle coat is perhaps often secondary to disease of the vasa-vasorum.

6. That when dilatation of the aorta occurs, in the larger proportion of cases it follows disease of the middle coat, which is in the nature of a degeneration, and not an inflammation.—*Maryland Med. Jour.*

Large Doses of Calomel in Pneumonia and Croup.—In the winter of 1885 and 1886, I was led by an editorial in *The Medical Record*, to try ge doses of calomel in croupous pneumonia. The ults were so good that I have continued to use he number of my cases being now about twenty. were in the stage of exudation, with high or ng temperature. In age they ranged from eight over sixty years. In severity from cases which uld have recovered under any treatment, to se that I considered desperate. In every case re was immediate improvement in temperature, iration, and heart's action, subsidence of the disease in twenty-four hours, and, with one exception, rapid recovery, little or no stimulating or medication being needed. The exception was under most unfavorable surroundings, but was apparently convalescing, when purpura hemorrhagica set in, and the patient died from nasal hemorrhage. My usual and smallest dose was twenty grains every three hours, in most cases continued twenty-four hours. In one case, which I believed would be fatal, the patient took an initial dose of sixty grains, and thirty grains every three hours, until she had taken three hundred and sixty grains. There was no ptyalism in any case, and but moderate catharsis. One of the most remarkable features in every case was the rapid improvement in the heart's action.

I tried the same plan in three cases which I diagnosed as membranous croup. In two, the diagnosis was confirmed by expectoration of shreds of false membrane. In one of these, patches of exudation were visible. In the third, an infant of nine months, I was unable to confirm the diagnosis.

All were reported as improving in breathing before the second dose, and all made a rapid recovery. I gave to an infant eighty grains in ten-grain doses; to a boy aged six years, one hundred and sixty grains, in twenty grain doses; and to a boy of twelve years, only eighteen grains, in four doses. I never before had three consecutive recoveries from croup.

These few cases are not enough alone to prove the utility of the remedy, but at least they have convinced me that I can safely give, in similar conditions, doses that a few years ago I should have thought reckless.—Dr. Strong in *Med. Rec.*

The Acid Principle of the Gastric Juice.—Dr. V. Poulett has conducted a series of experiments with a view to obtain a better knowledge of the gastric juice. His conclusions are given as follows, by the Paris correspondent of the *Therap. Gaz.*

1. The gastric juice of adult omnivorous animals, healthy man, for instance, contains in the first part of digestion hippuric acid alone. Near the end of digestion tartaric acid also makes its appearance. As an exception the two acids may be found, in dyspeptic subjects, present together, from the beginning of the digestive process. 2. The stomachs of all young animals before weaning, contain almost no other acid than tartaric. 3. All adult carnivora, dogs included, have free tartaric acid in their stomachs. Hence dogs should not be chosen for comparative gastric juice investigations and experiments; but pigs should be preferred, owing to the similarity of their dental and digestive system. 4. The gastric juice of man, sick or well, never was found, in the experiments tried, to contain lactic or sarcolactic acid; the

same was true of animals. 5. Hippuric acid extracted from the gastric juice possesses all the chemical properties of the same acid found in the urine of herbivorous animals. But tartaric acid of like origin somewhat differs from the vegetable acid. It will, for instance, effervesce with sulphuric acid, when heated, and present otherwise some of the racemic acid (para-tartaric) characteristics. 6. The behavior of dyalyzed gastric juice with colored re-agents is not at all that of free muriatic acid, but that of hippuric and tartaric acid or their acid salts. 7. The intestinal secretion helping to complete the digestive process is invariably acid, and is rendered so by a tartaric acid of the variety already noticed.—*Cincinnati Lancet-Clinic.*

THE DREAD OF DEATH.—Sir Lyon Playfair, in a letter to Junius Henri Browne, author of a paper in the New York *Forum*, under the above title, says: "Having represented a large medical constituency (the University of Edinburgh) for seventeen years as a member of Parliament, I naturally came in contact with the most eminent men in England. I have put the question to most of them, 'Did you, in your extensive practice, ever know a patient who was afraid to die?' With two exceptions, they answered, 'No.' One of these exceptions was Sir Benjamin Brodie, who said he had seen one case. The other was Sir Robert Christison, who had seen one case—that of a young girl of bad character who had a sudden accident. I have known three friends who were partially devoured by wild beasts under apparently hopeless circumstances of escape. The first was Livingstone, the great African traveller, who was knocked on his back by a lion, which began to munch his arm. He assured me that he felt no fear or pain, and that his only feeling was one of intense curosity as to which part of his body the lion would take next. The next was a Rustem Pasha, now Turkish Ambassador in London. A bear attacked him and tore off part of his hand and part of his arm and shoulder. He, also, assured me that he had neither pain nor fear, but that he felt excessively angry because the bear grunted with so much satisfaction in muching him. The third case is that of Sir Edward Bradford, an Indian officer, now occupying a high position in the Indian Office. He was seized in a solitary place by a tiger, which held him firmly behind his shoulders with one paw, and then deliberately devoured the whole of his arm, beginning at the end and ending at the shoulder. He was positive that he had no sensation of fear, and thinks that he felt a little pain when the fangs went through his hand, but is certain that he felt none during the munching of his arm."—*Scientific American.*

MALE STERILITY AND GYNÆCOLOGY.—Dr. Fürbringer, of Berlin, has written some important observations on this in the *Deutsche Med. Wochenschrift.* He believes that sterility in the male is far more frequently the cause of barren marriages than is generally believed to be the case. Aspermatismus is associated with complete impotence, but azoospermia, or absence of spermatozoa in the semen, a condition by no means rare, may exist with perfect potency, and on that account is very easily overlooked. With few exceptions, azoospermia is caused by obliteration of part of the seminal ducts. This condition is generally caused by double gonorrhœal epididymitis, or inflammation of the vas. After that malady, the chances are, Dr. Fürbringer has calculated, nine to one that azoospermia will follow. Prognosis appears to be hopeless when the condition in question is not discovered till three or four months after the onset of the local inflammation. The chief importance of the manage ment of the case lies in accurate diagnosis. True aspermatism is traced by Dr. Fürbringer to arrested developement of the ejaculutory ducts. He declares that in several cases of sterile mar riages under his own observation the unfortunate wife had been sent from physician to physician, or from hospital to hospital, and her cervix divided or her endometrium scraped, until a glance at the microscope proved that nothing was wanting to ensure the blessing of children, excepting spermatozoa. Dr. Fürbringer's observations are worthy of consideration. No doubt the increase of temperance involves the relatively greater frequency of those forms of gonorrhœa where the early symptoms are very mild. Hence the first stages may now be as much neglected by patients as they have ever been wont to neglect later stages. The more a case of gonorrhœa is neglected, the greater will be the chance of serious secondary complications.—*Bri. Med. Jour*

THE TUBERCLE BACILLUS.—A French contemporary gives a vivid description of the vitality of the bacillus of tubercle. Of all mico-organisms it is one of the most refractory to the action of the most destructive agencies. It maintains its virulence after lying for forty days in putrid sputum, and for 186 days away from contract with air. It can live at temperatures between 86° and 104° F. The most unfavorable conditions, though affecting its activity, do not compromise its existence, for it resumes its virulence whenever it surroundings become suitable. To render it ir active it is necessary to have recourse to violer means, such as ebullition, steaming, or prolong contact with antiseptic substances, such as a monia, concentrated salicylic acid, abolute alcoh or a strong solution of carbolic acid. Corrosi sublimate itself is said to be powerless to disinf the sputum. The bacillus acclimatizes itself am the most unfavorable surroundings. It compl

with the exigencies of its condition, and even alters its shape, but without losing any of its virulence, of which it gives ample evidence whenever fortune favors it. Its polymorphism is not the least curious point in the life-history of this organism. Thus it is sometimes a short rod, sometimes a line —occasionally it splits and forms spores—but it always returns to the bacillus in its complete form, with its virulence intact, whenever circumstances become favorable. "It knows how to suffer, but it never loses sight of its claims."—*Cincinnati Lancet-Clinic.*

BROMIDIA AS A HYPNOTIC.—The success which this drug has achieved in France is somewhat remarkable. The French as a nation are remarkably conservative in everything save their politics, adhering tenaciously to the ideas and objects with which they are familiar, and regarding with corresponding suspicion all novelties and innovations, especially those coming from abroad. Hence it is that the materia medica of France has not marched *pari passu* with that of its neighbors The bromidia (Battle) at once attracted the attention of French physicians, and their experience with it so developed their confidence in it as a prompt, reliable and harmless hypnotic that, in utter disregard of all that they had been taught and believed respecting the danger and unreliability of alien products, they promptly accorded it a place in their repertoire of remedial agents, and are now using it as freely as any medicinal preparation included in the Codex. In no other country, in fact, does it enjoy a larger measure of popularity than in France, and so great is the demand for it that it has been found necessary to manufacture it here in large quantities, in an establishment especially arranged and orgaznied for that purpose.

To those familiar with the use of bromidia (Battle) no argument like this is necessary, for it speaks for itself by fulfilling the indications for which it is administered with a certainty, efficiency and harmlessness which elicit at once the delight of the prescriber, and give to the profession the assurance of possessing one remedy, at least, which approximates so near to infallibility of action as to justify the title of *specific.—Medical Press and Circular.*

ELECTROLYSIS IN STRICTURE.

(OPEN LETTER TO DR. NEWMAN.)

THROUGH THE EDITOR OF THE MEDICAL RECORD TO

ROBERT NEWMAN.

: In the recent discussion as to the merits ectrolysis in the radical cure of urethral stric- e, it is possible that the failures of Professor -- may be attributed to faulty methods, while your own failure, in the case reported by Professor Keyes, is only conclusive as a single case.

It seems to us to be a comparatively easy matter to settle the disputed point (as you are aware, one of the greatest interest to the whole surgical world); *i.e.*, whether electrolysis is of any value whatsoever in the treatment of organic urethral stricture.

We would, therefore, be pleased to provide ten patients, subjects of organic stricture, as determined by a committee of competent surgeons, with a request that you will choose five from this number, and demonstrate the advantages of your method upon them. In the meantime we shall be glad to treat the remaining five by dilating urethrotomy. After treatment, we would request that there be no instrumental interference, of any kind, for a period of at least one month, when they shall be re-examined by the original examiners, and the condition of their urethras reported on, said report to be sent to every medical journal in the United States, and, as far as possible abroad, with a request for publication.

Feeling you will kindly accept this proposition to vindicate the merits of your methods, we remain,

Sincerely yours,

GEORGE E. BREWER, M.D.
WILLIAM K. OTIS, M.D.

VANDERBILT CLINIC, GENITO-URINARY DIVISION,
NEW YORK, February 6, 1889.

PHYSIOLOGICAL ACTION OF SULPHONAL.—(1) It does not effect the irritability of the motor nerves.

(2) It does not alter the muscle curve.

(3) The sensory nerves are left intact.

(4) It depresses reflex activity mainly by an action on Setschenaw's centres, occcasionally it exalts reflex excitability.

(5) It acts as a narcotic.

(6) The pulse is usually somewhat accelerated.

(7) The arterial tension, after a temporary fall, is considerably increased.

(8) Respiration is depressed, section of the vagi does not alter the effect.

These facts lead me to believe that sulphonal will replace choral to a considerable extent. The well known dangerous action of chloral as to heart and respiration is avoided with this drug, and if the narcotic effects are equal, sulphonal should have the preference. Whilst I have seen the heart paralyzed by the drug in a few minutes, yet it was due to the sudden action of the drug by the jugular and perhaps partly to some of the drug being thrown down on account of its insolubility, for the solution was somewhat warmer than the temperature of the blood.—Dr. Shick in *Jour. Nervous. and Mental Disease.*

CANADIAN MEDICAL ASSOCIATION.

The twenty-second annual meeting of the Canadian Medical Association will be held at Banff, N. W. T., on the 12th, 13th and 14th of August next. The Canadian Pacific Railway Company has agreed to carry members and delegates with their wives or members of their families at the following rates: From points in Ontario or Quebec, to Banff, and return at $95.00 each, including a double berth in sleeping-car for each person, and meals in the dining-cars on the way west from Montreal or Toronto and back, and four days living at the Banff Hotel. The passage tickets will be made good from and to any points on the Canadian Pacific Railway, in either Ontario or Quebec, to Montrael or Toronto, but berths and meals will begin at these two places only. From other points in the Dominion the rates will be as follows: From Halifax to Banff and return $110, from St. John, N. B., to Banff and return, $100, but the tickets from these points will not include sleeping-car accommodation nor meals east of Montreal, in either direction. From Port Arthur to Banff and return, the rate will be $60; from Winnipeg or Brandon $50.; from Regina, $35, including meals and berths from all these points. From Calgary, the rate will be $4.50, without meals or berths. From Victoria and Vancouver to Banff and return, including meals in dining-car and double berth, in both directions, $30. exclusive of hotel accommodation at Banff, or $40, including four days hotel accommodation at Banff.

Owing to the provisions of the Interstate Commerce Law, it will be impossible to get reduced rates from points in the United States, with the exception of St. Paul, Min., from which the following rate is offered: $60, to Banff and return, including meals and sleeping-car accommodation between Winnipeg and Banff only. Delegates from the United States, are therefore requested to make their own arrangements between their homes and Montreal, Toronto, St. Thomas or other points on the C. P. R. An effort is also being made to secure special rates from Liverpool to Montreal by the Canadian Steamship Lines, for trans-atlantic delegates,

It is intended that the party shall leave Montreal on the evening of the 6th of August, by the regular Pacific Express, and arrive in Winnipeg on the 9th, and stop over one day there, leaving Winnipeg on the 10th of August, they will arrive at Banff early on the morning of Monday, August 12th. The meeting of the Association will then be held in the hotel (*accommodation being provided by the C. P. R. Co.,*) on the 12th, 13th and 14th, after which the members of the party can either return at their convenience or take a trip to the coast, leaving early the following morning (August, 16th), for which special terms have been arranged as follows: From Banff to Victoria and return, not including meals or berths, $20, or $30, including meals in the dining-car, and berths. The tickets for this excursion will be on sale at Banff, to members and delegates and their families only.

The Special Ticket issued by the C. P. R. to Banff and return will be good for 60 days, and the holders will be allowed to stop over, privileges on the Canadian Pacific Line in either direction at pleasure. They will also be exchangeable at Port Arthur and Owen Sound, so as to enable members to travel in either direction by steamer, between these points. Meal and berth coupons will be issued in connection with these tickets, and will be available as part payment of expense of any who wish to make additional stops, and spend longer time on the line. It is considered desirable, however, by the Executive Officers of the Association, that as far as possible, the party should travel together by the all rail route as far as Banff, so that all may be present at the opening of the meeting.

In addition to the members of the Canadian Medical Association, to whom this circular is especially addressed, a cordial invitation is here by extended to all members of the regular profession, in good standing, in the Dominion of Canada, the United States and Great Britain, to whom the necessary certificates will be sent on application to the Secretary.

Members and delegates are requested to notify the Secretary of the points on the C. P. R., from which they intend to start at a sufficiently early date to enable the railway company to forward special tickets to the aforesaid points. It will also be necessary to present a certificate from the General Provincial Secretary to enable members or delegates to secure the above mentioned special tickets. Members who intend to present papers at this meeting are requested to inform the Secretary at as early a date as possible of the subjects which they propose to bring forward.

GEO. ROSS, M.D., *President.*

JAMES BELL, M.D., 53 Union Ave. *Gen. Sec.*

SUPPOSITORY FOR CYSTITIS (Reliquet):—

R.—Iodoform.	0 gr. 10 cent.
Ext. of hyoscyamus . .	0 gr. 07 cent.
Cocoa butter	3 grammes.

Make into a suppository, and introduce into th rectum in cases of cystitis; morning and evenin thorough irrigation with luke-warm water. If ther is any urethral secretion, take, morning and eve ing, a pill containing tea cetigrammes of terpine.- *Jour. de Méd.*

YELLOW fever is epidimic at Rio Janiero.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address,* DR. J. L. DAVISON, 12 Charles St., Toronto.

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AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

TORONTO, MAY, 1889.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

IS A SIX MONTHS' SESSION NOT QUITE LONG ENOUGH, FOR BOTH PROFESSORS AND STUDENTS, IN THE MEDICAL COLLEGES?

In all the British as well as in all the Canadian Medical Schools and Colleges, the winter session is practically of six months' duration. The Lectures begin October 1st each year, and go on steadily with the much-needed interruption of about two-and-a-half weeks of Christmas holidays.

The Council requires every student to attend four such sessions. During the first, the primary branches are studied. During the remaining two the final work has to be mastered.

The six months' session, without any crowding whatever, admits of full courses of one hundred lectures being delivered on every main subject, primary and final. There is besides this, the practical work, primary and final, at the Colleges, and at the hospital, for every man attending. The work of each day is so arranged as to be over by six o'clock in the evening or thereabouts; this le the student his evenings, which, if wise, he w nd largely in study—going over the work d ring the day at the college and the hospi As far as exercise is concerned he has had al needs for the day in the college gymnasium, or walks from his boarding-house to and fr college and the hospital.

there is manifestly *no excessive*, but only *regular* work. The student finds his time fully and profitably employed, and if a good, faithful worker, he is not tempted to waste his valuable time by having too little daily work assigned him.

In a short address recently delivered at the special Convocation for conferring medical degrees at the University of Toronto, Dr. T. Aikins suggested that the present six months' sessions were far too short, and that they should be of nine months' duration, so as to give full time for the getting up of the work, and to do away with the need for "cramming" for examinations as at present. He said that in order to do this "cramming," the students drop out of their classes in the middle of February.

Now we submit that to make the sessions last for nine months would be to all concerned unendurable. If the professors and students who work really hard for six months, had to go on for half as long again, most of them would simply break down. But it may be said that "with a longer session, the same amount of work done, would be easier for all parties, because spread over a much longer time." The reply which would suggest itself to nearly all practical students and teachers is this, and to our minds it appears unanswerable. Good lectures, regularly delivered, are far more interesting and useful to those who attend them, when the interval between them is not made needlessly long. At present it is quite easy within the six months, with only five lectures a week, on each main branch, to complete the required hundred, the number laid down in Great Britain and in Canada, and which, if ably and honestly given, ensures a good course. If the course were spread over nine months, the lectures being much further apart, would lose their interest for the student to a large extent, and having fewer lectures to attend in a given time, would in nineteen cases out of twenty, lead the members of the classes not to devote more time to reading, but to be more idle, because with lectures few and far between, there would be no longer any necessity for steady work. And when the nine months' session would be drawing to its close, its advocates would find out that there was just as much and even more cramming done than at present, to make up for the easy-going, low-pressure style of teachers and students, who had dawdled for *nine* months through work which is

now far better, and much more impressively got over in *six*.

We take exception also, to the statement being generally correct, that students "drop out of their classes in February to cram for examinations." We are familiar with a good many classes in several colleges where this is not at all the case—where contrariwise, the attendance continues large to the very last lecture. We believe this to be the case in Trinity Medical College, in the Royal at Kingston, at McGill in Montreal, and in London. Another point struck us as very peculiar in the remarks we have referred to, viz., that the speaker urged the Hon. the Minister of Education and the President of University College to bring all possible pressure to bear on the Medical Council to have that body lengthen the session as suggested. The Hon. Dr. Ross, as well as the worthy President, are too wise men not to see how awkward a position they would occupy in trying to carry out this suggestion. The Medical Council being composed exclusively of medical men and medical teachers fully capable of judging what it is best and most judicious to do in a matter so peculiarly within the special sphere assigned to it by the Legislature. The Council has done very well in the past, and we have full faith in it for the future. To make a summer session of, say, ten or twelve weeks duration compulsory, might be a wise step on the part of the Medical Council, and were this done, some of the minor subjects might be taught during the summer, and thus leave more time during the winter to be devoted to work such as practical anatomy, which can be prosecuted to advantage in the winter months only.

OUR ICE SUPPLY.

The immense importance of the exclusion from food of all possible germs of disease is a matter which has been agitating the mind of the profession ever since clear ideas of disease germs have been advanced. Latterly, as the laity has become more or less enlightened on the subject, and have gained somewhat intelligent ideas regarding the mode of transmission of communicable diseases, great interest has been shown in the prevention of the advent of disease whether by food, water or whatever agent has been supposed active in its diffusion. In all centres of population, not to mention rural districts, very rigorous measures have been adopted in this direction, with the result, that disease and suffering have certainly been lessened, and much wealth saved to the country. If there be one thing, more than another, which characterizes the highest civilization of the present age, and may be universally looked upon as the measure of the civilization of any given community, it is the means adopted by governments, whether municipal or general, to protect the lives and health of the populations living under their jurisdiction. True, large sums of money are annually spent to maintain the necessary machinery by which this safety is procured, but with what true economy such sums are spent, must be patent to every one.

The spread of such diseases as scarlet fever, measles, etc., by communication between persons suffering from such diseases and those who are healthy is evident to the most ignorant; but the more insidious, though equally dangerous agent, water, is not looked upon by the uninitiated with the suspicion its importance as a means of carrying disease and death entitles it to. Our milk, meat, bread and vegetables are inspected with some degree of care in all urban localities, and it may be said that, thanks to the agitation of our Boards of Health, led by medical men, the question of pure water is the sanitary question of the day. Here in Toronto, a city noted among Canadian cities for its progression in all modern ideas of sanitation, we have had "water-works" *ad nauseam*, and it is only in the near past that the question of our immediate future supply has been definitely settled, after infinite trouble and great expense, and by the aid of experts from the United States. But as we have intimated, no amount of trouble or expense can be considered too great, in effecting the perfection of our arrangements for a full and free supply of water, of known and undoubted purity; and true economy points in the direction of making the most supreme effort if necessary, for the consummation of this most important end. All this machinery and expend re in the matter of quarantine, food inspection, w er supply, are certainly in the right directio ut there is one important article of food whi we are of opinion is answerable for a very con- ra- ble share of the disease of our cities and ns,

viz., *ice*. In a climate such as we have in Canada, with its almost tropical summer heats, ice is a necessary and almost universal article of food, and is very largely used in the preservation by cooling of various articles of food. An idea has been prevalent until very lately, that the process of freezing water purified it. That idea is now known to be erroneous, very many pathogenic organisms having been demonstrated as unimpaired in their vitality and power for harm, by degrees of frost far lower than the freezing point. So that all idea of safety by the intervention of nature in this direction may be put aside as untenable, and we may look for and confidently expect to find in many cases, the deadly disease-germ lurking in even the purest-looking block of ice our dealers leave on our door-steps on a summer's morning. At a late meeting of the Provincial Board of Health the following questions were submitted to the meeting:—

1. "Is the ice used in the city a source of danger"? The answer was "yes."

2. "Should it be used in Hospitals"? "No."

3. "How far can it be said to effect the general health"? "Its use is attended with danger."

Now the above being established, and no one can gainsay it either as regards Toronto or most other Canadian cities and towns, it seems an unheard of anomaly that we should spend so much money in the warding off of disease by the inspection of meat, milk, vegetables, and in procuring a pure supply of water, and yet allow ice to be supplied, of the purity of which we have practically no guarantee whatever. A want of space prevents our writing anything further in this number; but we shall, in our next issue, deal with the practical side of the question and undertake to show how the present most unsatisfactory state of affairs may be remedied.

THE NEW TREATMENT OF LOCOMOTOR ATAXY.

In our last issue we gave a selection from the
L on the mechanical treatment of Tabes Dor-
ss which has no doubt been noted by all our
re The question is so full of interest both
fr cientific and clinical point of view, that we
m is short note of later developments in this
n thod of treatment. Not only tabes but Fredreich's disease, paralysis agitans and various forms of chronic nerve degeneration are now being treated by the suspension method in the London Hospitals, and apparently with very considerable success. One result of the treatment is the improvement, and in some cases the disappearance even, of the impotence accompanying the disease. It will be remembered that Dr. Motchonkowsky, the originator of the method, believes it is of use in cases of impotence not connected with tabes. Professor Charcot suggests that the improvement may be due to a modification of the circulation in the cord, or to a stretching of the nerves as they leave it. So far as has yet been reported no improvement has been noticed in the Argyll Robertson pupil, or in the reflexes. The method is of course too new to enable any definite conclusions to be drawn, but it appears to promise well. Not only has it been thus far successful at the Salptétrière, but in the clinics of Professors Eulenberg and Mendel the results have been equally as happy. Dr. Charcot is publishing a carefully detailed account of the technique of the treatment, which will be translated into English by Dr. de Watteville in a few days. We hope to keep our readers posted as to the latest known facts regarding this important therapeutical agent.

THE BRITISH MEDICAL JOURNAL.

Some correspondence published in the above journal goes to show that a number of the members of the British Medical Association have become dissatisfied with the manner in which it has been conducted. They have addressed the President of the Association, in a circular, in which, while they state distinctly that the editorial duties pertaining to the Journal have been ably performed, they take issue with the management, arguing that "An opinion has for several years been widely held that the lines on which the Journal is now conducted, which are similar to those of proprietary journals, with anonymous articles and reviews and multifarious advertisements, are not suitable for the organ of our Association, for the sayings and doings of which our members individually are responsible." They recognize the fact that the Association will, by the proposed change, suffer pecuniary loss; but hold that body should now be self-sustaining, and that the individual self-respect of the

members is of more importance than a condition of flourishing finances. The Journal has not always been as particular in regard to the line of advertisements admitted to its columns as might have been expected considering the position it occupies. To cover this point and some others the signers of the circular say—"It is felt that the Journal should be a faithful exponent of the proceedings of the Association in all its departments, whilst presenting a record of contemporary professional work elsewhere; but that anything beyond this, whether articles, reviews, or annotations, should have the authors' signatures appended, as indicating the actual authority of the communications. The character of the advertisements, also, should be more carefully controlled than at present, and especially all announcements of secret remedies should be excluded." Some of the most prominent men in Britain have joined in this movement, which will no doubt take on large proportions, and the result become a precedent for other Journals holding similar positions.

ONTARIO MEDICAL ASSOCIATION.

The following is the list of papers received by the Secretary, Dr. Wishart, up to date:—

Dr. Parke, Buffalo, "Radical Cure of Hernia"; Dr. A. Smith, New York, "Empyæma"; Dr. Skene, Brooklyn, "Intraligamentous Ovarian Cystoma"; Dr. Graham, Toronto, "The Treatment of Eczema"; Dr. Grant, Ottawa, "Transient Albuminuria"; Dr. Mitchell, Enniskillen, "Early Operation in Cases of Abdominal Disease"; Dr. Sweetnam, Toronto, "The Probable Future of Electricity in Gynæcology"; Dr. Ryerson, Toronto, "Some forms of Headache"; Dr. Macdonald, Wingham, "Nerve-stretching in a case of obstinate Sciatica"; Dr. Tye, Chatham, "Prognosis in Albuminuria"; Dr. McPhedran, Toronto, "Abortive Forms of Typhoid"; Dr. Gibson, Belleville, "Interesting cases in Practice"; Dr. Newman, New York, "Electrolysis in Surgery and Gynæcology"; Dr. Dickson, Kingston, "A plea for Electricity in Medicine"; Dr. Smith, Orangeville, "The pathological relation of Spleen and Bone-medulla.

Papers are also to be read by Drs. Adam Wright and Teskey, of Toronto; Drs. Powell, of Ottawa; Dr. Howitt, Guelph; Dr. Ross and Buller, of Montreal, but the subjects have not yet been furnished to the Secretary.

MEDICAL EXAMINATIONS.

VICTORIA UNIVERSITY.

M. D., C. M.—E. Bull, W. H. Groves, J. A. Ivey, D. McLeod, H. Yeomans, J. B. Guthrie, W. Egbert, J. L. Turnbull, S. Rutherford, W. Almas, A. J. Harrington, Halliday, R. G. Howell, D. Henderson, Birdsall, D. Archer, A. A. Smith, H. Wallwin, McPherson, D. McKay, McDonald, J. H. Reid, G. A. Whiteman, J. A. Forfar, J. Greenlaw, F. N. G. Starr, J. Noble, C. Lockyer, F. Preiss, J. M. Harwood, J. W. Cunningham, S. Bates, C. McLachlan, W. Gimby, A. J. Reynolds, T. A. Noble, J. Tweddle, T. L. Stringer.

Primary.—E. P. Gordon, F. H. Sherk, R. J. Chrystal, G. C. Clingan, S. Watt, A. W. Mayburry, F. McConaghey.

TRINITY MEDICAL COLLEGE.

First Year.—Scholarships—First, 1st year's scholarship, $50, Harold C. Parsons; second, 1st year's scholarship, $30, D. Beattie; third, 1st year's scholarship, $20, J. McMaster.

Certificates of Honor—Harold C. Parsons, D. Beattie, J. McMaster.

First Class, 70 per cent. and upwards—C. N. Callendar, A. Quackenbush, W. L. Matthew, J. J. Thompson, D. McEachren, R. G. Wallace, A. S. Tilley.

Second Class, 60 per cent. and upwards—H. J. Watson, H. L. Barber, W. Glaister, W. H. Miller, H. B. Anderson, G. W. Davidson, E. B. Blain, R. M. Curts, W. Northrup, E. O. Bingham, H. Morrell, N. W. Cousens, W. E. Brown, J. A. Mitchell, A. P. Chalmers, W. Potter, R. A. Buck, R. D. McLaughlan, J. P. Trainor, E. F. McCullough, W. E. Ogden, W. M. Robertson.

Pass Men—A. L. Murphy, R. M. Mitchell, F. C. Merritt, W. J. Awty, H. J. Orchard, H. Robins, S. J. L. Alexander, T. M. Allan, H. R. Bidgood, J. W. Brien, R. E. Cooper, A. M. Cleghorn, A. Hath, R. G. Feek, E. W. Goode, L. E. W. Irving, E. N. Wagar, T. M. Williamson, A. S. Wade.

Primary Examination Scholarships—First, 2nd year's scholarship, $50, Jas. Sutherland; second, 2nd year's scholarship, $30, Jas. Third.

Certificates of Honour, 75 per cent. and upwards—J. Sutherland, J. Third, R. Knechtel, D. Johnston, W. W. Herriman, C. A. D. Fairfield, C. McKay, H. W. Porter, C. C. Fairchild.

First Class, 70 per cent. and upwards—J. J. Danby, T. S. Glenn, J. B. Martyn, J. J. Moore, P. Robertson, J. W. Shaw.

Second Class, 60 per cent. and upwards—J. [illegible] Ashbaugh, A. W. Bell, H. J. Crease, J. Crooks, [illegible] D. Farmer, T. Farncombe, A. E. Henry, J. L[illegible] ridge, W. Montgomery, A. J. Murray, A. W. Ni[illegible], H. A. L. Reid, W. A. Sherrin, A. A. Sutherland [illegible] R. Walls, R. H. White.

Primary Pass Men—R. Archer, L. E. Bolste[illegible] Fenton, H. H. Gray, A. H. Hough, A. C. Hun[illegible], A. W. Quay, C. A. Temple, W. W. Thompson. [illegible] Thomas.

Final Examinations.—The final examinations for the Fellowship Diploma of the College resulted as follows:—

Good Medallist—H. W. Armstrong.
First Silver Medallist—J. I. Wiley.
Second Silver Medallist—H. A. Turner.

The Dr. Fulton Memorial prize for the highest standing in surgery, amongst the candidates who have spent four winter sessions at this college—H. W. Wilson.

Certificates of Honor, 75 per cent. and upwards—H. W. Armstrong, J. I. Wiley, H. A. Turner, J. M. Macfarlane, H. W. Wilson, L. W. Allingham, G. K. Crosthwaite.

First Class, 70 per cent. and upwards—G. Hargraves. H. Chapple, F. W. Penhall.

Second Class, 60 per cent. and upwards—T. J. Macnally, A. J. Macnaulay, W. J. Milne, P. Brown, O. L. Berdan, W. W. Birdsall, W. Kerr, F. G. Salter, J. Brown, T. McEdwards, G. S. Rennie, A.M. Spence, Thos. J. Mober, T. H. Johnston, W. A. Dixon, N. W. Nasmyth, T. C. Patterson, D. A. Rose.

Pass Men—N. E. Bateson, M. C. Dewar, A. E. Edgar, F. A. R.Gow, J. B. Guthrie, W. F. H. Newbery, A. G. Patterson, J. T. Rogers, W. W. Thompson, H. J. Mullen, B.A., A. E. Mills.

TRINITY UNIVERSITY

M.D., C.M.—Final Examination.—Gold medallist and certificate of honour, H. W. Armstrong. Silver medallist and certificates of honour, H. Chapple and J. M. McFarlane (æq.).

Certificates of Honour have been won by L. W. Allingham, W. Kerr, Miss J. S. Carson, J. S. Wiley, T. S. McNally, P. Brown, G. S. Rennie and Miss S. M. Taylor (æq.). The following were also placed in Class I.—H. W. Wilson, G. K. Crosthwaite, H. A. Turner, W. A. Dixon and G. Hargreaves (æq), H. A. Stewart, J. R. McCabe and F. G. Salter (æq), H. J. Cummings and P. W. H. McKeown (æq.), W. J. Milne, J. T. McKillop, H. D. Quarry, W. D. Springer.

Class II.—R. W. Rooney, W. W. Nasmyth, A. M. Spence, M. C. Dewar, J. B. Guthrie and H. J. Mullen and F. W. Penhall (æq.), W. W. Birdsall, A. E. Wills, R. A. McArthur, W. C. David, D. A. Rose, W. W. Thompson, W. A. Macpherson, A. G. Patterson, O. L. Berdan and R. McGee (æq.), T. J. Moher, T. C. Patterson, J. W. Cunningham, S. Bates and W. E. Bateson (æq.), T. McEdwards, J. M. Henwood, P. Drummond, T. H. Johnston, J. T. Rogers, A. E. Edgar and F. A. R. Gow (æq.), J. Holdcroft and A. McMeans (æq.).

Class III.—H. Mason, M. C. Black, J. A. Gent, E. Sands, N. Walker, W. F. H. Newbery, F. Cloutier, J. F. McCormack, B. Z. Milner.

mary.—Jas. Sutherland, 1st silver medal and cate of honour; Jas. Third, 2nd silver medal certificate of honour. The following were ·ded certificates of honour: R. Knechtel, D. ason, W. D. D. Herriman, C. A. D. Fairfield, s. Mackay, W. G. Sprague, H. W. Porter, J. T. ıeringham, M. McClelland, C. C. Fairchild. The owing were also placed in the first class: J. J. ore, J. J. Danby, T. S. Glenn, J. W. Shaw, J. B —n, P. Robertson.

ıs II.—G. J. Teedy, W. Montgomery, J. Lock- T. S. Farncomb, Miss M. A. Gifford, H. A. L. Reid and W. A. Sherrin (æq.) G. D. Farmer, A. A. Sutherland, J. A. Ashbaugh, J. G. McGee and J. R. Walls (æq.), A. E. Henry, F. R. McBrine and A. J. Murray (æq.), Jas. McQueen, A. W. Nixon, A. W. Bell and R. A. White (æq.), J. Crooks, Miss L. Graham, H. G. Grease.

Class III.—H. H. Gray and T. C. Irwin (æq.), A. C. Hunter, C. L. Finch, C. F. P. Abraham and McLean Caverly (æq.), A. E. Douglas, Miss L. K. Meade, L. E. Bolster, F. Featon, R. Archer and C. A. Temple (æq.), F. A. W. Quay, W. S. Ferguson, S. B. Elliot, A. H. Hough, A. F. Dixon, W. W. Saulter, A. J. Thomas, W. W. Thompson.

TORONTO UNIVERSITY.

Medals and Scholarships.—The Starr Gold Medal, J. H. Collins. The Starr Silver Medal, G. Chambers. The general proficiency medals were carried off by the following students:—

The gold medal, G. Chambers. The first silver medal, J. H. Collins. The second silver medal, F. E. Godfrey.

The following gentlemen were awarded scholarships:—Third year—1, L. F. Barker; 2, W. H. Philp. Second year—1, W. N. Barnhart; 2, G. P. Macartney. First year—1, T. H. Middlebro; 2, H. A. Bruce.

M.D.—Franklin Burt, W. Burt, J. McCallum, H. G. Lackner, G. G. Rowe. *(Ad eundem gradum)*—W. T. Aikins (Victoria), G. H. Burnham (Trinity), D. Clark (Victoria), E. E. King (Victoria), J. S. King (Victoria), B. E. McKenzie (McGill), R. A. Reeve (Queen's), F. Winnett (Trinity), H. C. Scadding (Trinity), B. L. Riordan (Trinity).

M.B.—W. E. Almas, W. J. Armstrong, G. M. Bowman, J. E. Bowman, J. T. Campbell, G. Chambers, C. P. Clark, J. H. Collins, W. Egbert, J. B. Gamble, M. E. Gillrie, F. E. Godfrey, J. A. Greenlaw, J. S. Hart, J. A. Ivey, A. B. Macallum, H. A. McColl, D. McKay, C. McLachlan, C. J. McNamara, E. Meek, R. H. Palmer, W. R. G. Phair, S. T. Rutherford, W. A. Sangster, G. Silverthorn, F. N. G. Starr, J. R. Stone, T. L. Stringer, J. L. Turnbull, H. Wallwin, J. Webster, T. S. Webster, A. J. Willson, W. McC. Wright, H. A. Yeomans.

Ad eundem gradum, A. Primrose, Edin.

Mr. C. E. K. Vidal passed creditably in all the final subjects, but did not receive his degree yesterday because he is not twenty-one years of age. He will receive the degree of M.B. at the spring convocation in 1890.

TREATMENT OF FISSURE OF THE ANUS.—Dr. Gregney (*Gaillard's Med. Jour.*) believes he has discovered a simple, painless, but effectual method of curing all fissures of the anus without resorting to operation. His method consists in securing a thorough evacuation of the bowels every morning, and then introducing between the lips of the fissure a few shreds of lint saturated with a solution of chloral, 1 in 50. This lint is left *in situ* until the evacuation of the rectum next morning carries it away, when the same dressing is repeated. These

applications are repeated daily until the fissure disappears, which is usually about the tenth day of treatment.

REMOVAL OF A CEREBRAL TUMOR.—Prof. Pean has lately performed (*Gaz. des Hôp.*) the first operation of this kind ever done in France. The patient had suffered from Jacksonian epilepsy, and M. M. Ballet and Gelmeau located the tumor causing it in the upper motor region of the cortex. It is said that the patient has been completely cured.

STILL ANOTHER NEW HYPNOTIC.—A medical student of Bologna, S. Poppi, has lately described (*Br. Med. Jour.*) the effects of a new hypnotic for which he proposes the name *uralium*. It is produced by combining chloral hydrate and urethran. It appears from his report of the drug that it produces sleep more quickly in man and the lower animals than any other known hypnotic, without bad effects of any kind. He states that the happiest results have followed its use in various cases of heart disease, insanity, hysteria and other nervous complaints, even after other hypnotics had failed.

REMOVAL OF CALLOSITIES FROM THE SOLE.—Dr. Jamieson, (*Ed. Med. Jour.*) says :—A ring of glycerine jelly is painted about the lesion, and when dry a circular piece of salicylic acid plaster (salicylic acid 40, creasote 40) is cut to fit within the ring. The jelly is now painted over both the plaster and ring several times, and when almost dry a layer of cotton wool is placed over all. The whole dressing can be kept in place with one turn of a bandage, and should be cleansed once a week or oftener if necessary.

THE LATE DR. MURRAY GIBSON, OF PORTOBELLO, SCOTLAND.—We regret to notice the death of Dr. Gibson, of Portobello. He had practised only five years in that place, but was held in such high esteem that most of the shops closed and the funeral procession was joined by a large body of the public and friends of the deceased, as well as by many lodges to which Dr. Gibson had acted as medical officer. The Canadian students in Edinburgh sent floral offerings. Though a Canadian and stranger in Portobello, until five years ago, he had made a large number of close friends. His death will be mourned by many, not only in Scotland but also in Canada.

MEDICAL EDUCATION FOR WOMEN.—The movement in the direction of providing adequate means for the medical education of women, appears to have taken a hold upon the community. Montreal is now agitating for such an extension in connection with McGill University. It is stated that about $1,200 has been promised by a number of ladies, to form the nucleus of an endowment for such a medical college.

AT the Inter-Colonial Medical Congress of Australia, held in January, 1889, Dr. McLaurin, president of the Board of Health of Sydney, in an address on hygiene, said : Consumption has got a footing amongst us, and is now one of our most important causes of death (as high as 2.39 per 1,000 of population per annum). There is a good deal of trafficking in tuberculous cattle in New South Wales, for slaughtering and dairy purposes. A law is urgently required making it penal to traffic in diseased animals. Among the Jewish population in New South Wales, numbering 4,000, *in three years there was but one death from phthisis.* This is largely due to the avoidance of tuberculous meat, by the Jews.

METHOD OF REMOVING A TIGHT RING.—Mr. Moore, writing to *The Lancet*, gives the following on his "string method." Use the finest silk or thread consistent with strength, (ordinary housewife thread is strong enough). Pass the end between the finger and the ring, keeping the spool or unlimited end at the side next the finger-tip. Then wind downwards towards the tip of the finger for about a quarter of an inch ; then wind off from above by the short end about half this amount. Proceed alternately winding on and off, always leaving about one-eighth of an inch in breadth wound beneath the ring. When the knuckle is passed the ring comes of easily. Oil or soap thread well, and push up the ring before c mencing to wind. This method will, I believe move any ring.

A REMARKABLE CASE.—Dr. McLean relate case (*Am. Jour. Obs.*) of a child crying in uterus. Air had been admitted to the uterus b admission of the hand to correct a mal-positi

the head, the water having previously escaped. Dr. MacLean applied the forceps, the child crying loudly during the operation, "the voice sounding as if coming from the cellar." This continued for four or five minutes, till at length the child was safely delivered. Dr. MacLean states positively that the child's head was in the uterus, not in the vagina, while the crying proceeded. Mother and child did well.

ACETANILID IN TYPHOID FEVER.—In the *Prager Med. Woch.*, Haas reports the results of the administration of acetanilid in 104 cases of typhoid fever. He concludes that it does not exert any specific or abortive action on the disease, but that it is an excellent remedy for the treatment of certain symptoms. Its action on the high temperature, and on the nervous symptoms accompanying it, is very satisfactory and certain. More than one gramme a day is seldom needed, which must be reduced as the temperature falls to normal in the evening. It does not disturb digestion, has a favorable influence on the general nutrition, and increases the appetite. The patients assimilate food better, may be fed more freely, lose less weight and become more able to resist the injurious action of the fever. This method of treatment is fully equal to that by cold baths, while it is far less burdensome both to the patient and the attendants. It is contra-indicated only by intestinal hæmorrhage, perforation, and severe pulmonary complications, which demand special treatment. In cardiac weakness and collapse, it should be combined with stimulants.

TREATMENT OF PUERPERAL ECLAMPSIA.—Veil (*Snmm. Klin. Vort.*) relies on full doses of morphia, given hypodermically in eclampsia. He gives an initial dose of ½ of a grain, and follows it when required by half as much more. He finds that from 1½ to 3 grains are necessary in the first four to seven hours, in order to get the narcotic effect [illegible] drug. He does not believe in the benefit [illegible]arpine, thinking it favors œdema of the [illegible] He relies upon hot baths, followed by [illegible] for relieving the kidneys.

[illegible]NUT FOR TÆNIA.—Professor Paresi of [illegible] (*Lancet*) discovered while in Abyssinia, [illegible]nary cocoanut posseses vermifuge quali[illegible] high degree. He took a quantity of the juice and pulp, one day, which caused some gastric disturbance for a time. Subsequently diarrhœa set in, and to his surprise he found in the motion a complete tænia quite dead. After his return to Athens, he made a number of clinical observations, which were very satisfactory, the tænia being always passed and quite dead. He gives the milk and the pulp of one cocoanut early in the morning when the stomach is empty, and as it produces diarrhœa, no purgative is required.

EVIL RESULTS FROM SULFONAL.—This drug has become so popular, and has been so free from any evil effects that the following from the Berlin correspondent of the *Med. and Surg. Rep.* will be of interest:—"The new drug is, however, by no means so harmless as has been hitherto asserted by its manufacturers. Dr. Bornemann has just reported a case of severe poisoning resulting from the administration of the drug. The patient, to whom sulfonal was given for insomnia caused by cerebral excitement, was a physician. The result was a pronounced intoxication showing very complicated symptoms. There was a distinct interference of co-ordination, first in the lower and later in the upper extremities. He could not, for instance, raise a cup of coffee. A very prominent feature of the poisoning was his perverted feelings and illusions. The patient believed he had two heads, four feet and arms, etc.; or he believed he was on a boat or in a railway-car, and that some one was about to kill him. These illusions may be termed reflectory. The ataxia referred to is a central one, as it remained unchanged no matter whether the eyes were opened or closed. This distinction between central and sensory ataxia has been made by Professor Mendel. The drug did not exert any unfavorable influence over the heart and circulation—which appears opposed to the warning of Dr. Schmey not to use sulfonal in angina pectoris and arterio-sclerosis.

YET WE MOVE.—What may be called the "dry treatment" of gonorrhœa has been introduced. The process consists in the application to the urethra of whatever powder the practitioner chooses. A somewhat elaborate instrument, of which we do not know the name, has been devised to carry the powder to the desired situation. The method, though not yet old enough to supply reliable statistics, promises well.

NUX VOMICA IN HEART FAILURE.—Dr. A. Bourie writes to the *Lancet* that he has had excellent results in two severe cases of heart failure, from the administration of small doses of tincture of nux vomica given every half hour for four doses, then every hour. He thinks the drug stimulated the motor centres and the ganglionic system to increased activity, and rescued the patients from the consequences of obstructed pulmonary circulation and engorgement of the right heart.

CODEINE IN DIABETES MELLITUS.—Fraser (*Br. Med. Jour.*) claims that codeine is only a weak morphine, diluted by the addition to it of methyl. He has made several clinical experiments with it in diabetes mellitus, comparing it with the action of opium and morphine, and concludes that it is inferior in its action to either of these drugs.

FEVERS.—Dr. Barnett of Wisconsin, (*Am. Pract. & News*) claims that salicylate of ammonium is almost a specific in typhoid or remittent fevers, while Dr. Jackson, of Virginia, affirms it to be better adapted to malarial fever than to typhoid, and that the nitrate of ammonium is a much better remedy in typhoid troubles.

PNEUMONIA.—Dr. Petresco of Bucharest, (*Am. Pract. & News*) after treating over six hundred cases of pneumonia in the Roumanian army during the last five years concludes :—

(1) Pneumonia may be aborted by digitalis in strong doses ; (2) that this treatment gives the lowest rate of mortality ; (3) the doses from 4 to 8 grains per day, of the leaves in infusion ; (4) the tolerance and non-tonicity of this dose are proved by nearly six hundred clinical observations.

A MUNIFICENT DONATION.—By the will of the late Alexander Murray, of Montreal, the Montreal General Hospital will come into possession of the sum of $750,000. Next to the donation of $1,000,000 made by Sir Donald A. Smith and Sir George Stephen for the founding of the Royal Victoria Hospital of Montreal, that of Mr. Murray is the largest event ever made in Canada for any similar purpose.

REMOVAL.—Dr. Price Brown has removed from the cor. of College St., and Spadina Ave., to 39 Carlton St.

Dr. T. Millman has resigned the position of Assistant Medical Superintendent of the Asylum for Insane, Kingston, Ont. He moves to Toronto, about May 1st, where he purposes to practice, possibly devoting considerable time to nervous affections.

CANADIAN MEDICAL ASSOCIATION.—We beg to call attention to the circular *Re* the next meeting of the above Association on page 280. The circular will be distributed in a few days.

MCGILL UNIVERSITY.—The medical faculty of McGill University has appointed Dr. Craik, dean of the faculty, in succession to the late Dr. R. P. Howard, and Dr. Geo. Ross, vice-dean.

Books and Pamphlets.

A PRACTICAL TREATISE ON NERVE EXHAUSTION (neurasthenia), ITS SYMPTOMS, NATURE, SEQUENCES AND TREATMENT, by George M. Beard, A.M. M.D., Fellow of the New York Academy of Medicine, etc., etc. Edited with notes and additions, by A. D. Rockwell, A.M. M.D., professor of electro-therapeutics in the New York Post Graduate School and Hospital, etc., etc. New York : E. B. Treat & Co., 1889 ; Pp. 254. $2.75.

This work will be welcomed by the profession as treating of a subject which is too little known. The term neurasthenia is often used, when the physician is puzzled to find a more (to him) specific term for the patients ailment. The present work is the result of the experience and study of an entire professional life, in the subject to which it relates. In these days of mental strain and rapid living, a full understanding of nerve exhaustion is of vital importance to the physician, who would conscientiously treat a large number of his patients suffering from this or allied neuroses. We commend the book as an excellent one.

We have just received from Virtue & Co., of Montreal, a fine edition of Hilton Fagge's Pr-- tice of Medicine. As we are just going to pr we have no time to give a sufficient review of work. To all who have read the latest works medicine any notice will be superfluous, as Fa is now looked upon as a classic. The present tion is, as before, in two handsome volu of about 1,900 papes, and will be sold by subsc tion by Virtue & Co., of Montreal, and by Geo Virtue, publisher, of Toronto.

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Original Communications.

CLINIC—BY A. L. LOOMIS, M.D.,

Professor of the Practice of Medicine, University of New York.

Delivered at Bellevue Hospital, May 1st, 1889.

This patient has been sick, off and on, since last Thanksgiving Day; up to that time he was perfectly well. For the last seven years he has been a heavy drinker. He is now 29 years of age, and up to 20 was comparatively temperate. He has been employed in a grocery store, and there had ample opportunities to partake of all the various liquors, which, he states, were of rather a poor quality. On Thanksgiving Day he got his feet wet, and had repeated chills. He rapidly became worse, so that he was compelled to take to his bed, and entered the hospital. After remaining there for a short while, he improved so that he was able to walk around, and leave the hospital. He immediately started his old alcoholic habits, and on the 23rd of January he again entered the hospital for œdema of the feet. He remained until March, when he was discharged improved.

In April, he again entered the hospital. Since Thanksgiving Day he has had gastric pains, and pains in the cardiac region; his feet have been swollen; he has spit blood, and now expectorates bright red blood; he has also had hæmoptysis; never has vomited blood, or voided any by the bowels or urine. Has also had pains in the est, some cough and shortness of breath; when attempts to read his eyes grow dim and the per seems to go round; has never had headache, t has noticed some swelling under his eyelids; s never noticed any difference in the amount or racter of his urine, but states that he has had e difficulty in passing it at times; there is no nce of stricture or venereal disease. However, on examining his urine, a very different state of affairs is found, sp gr. 1025; acid, high in color; albumen, 60 per cent. The microscope shows hyaline, epithelial and blood casts, some red and white blood corpuscles—evidence of an acute parenchymatous nephritis. As you look at his face he is extremely anæmic; there is some œdema under the eyes; hands are white, pulse 84 and slightly irregular in force and rhythm. On looking at his legs you see purpuric spots, due to extravasations of blood under the skin. These spots are the result of blood and vascular changes.

This patient has an aortic regurgitant murmur, but you do not get the piston, or water-hammer pulse. In order to obtain this pulse two conditions are necessary: first, that you have an aortic regurgitant lesion; and, secondly, that you have a good sound heart-wall. In this case the second condition is wanting, as the heart is dilated, and its walls the seat of degeneration. You notice a pulsation in the arteries of the neck; you feel a thrill over the aortic valves, the aortic fremissement. The apex beat is diffused and displaced downwards, and to the left in the axilla; the point of maximum intensity is a little to the left of the nipple; there is a thrilling sensation felt with it, but it is not a purring thrill. The same thrill is felt over the arteries in anæmic subjects with valvular lesions. This man has cardiac valvular lesions, and the question comes up, whether the valvular lesion preceded the renal lesion, or is secondary to it. Much has been written, during the last few years, concerning the relationship of cardiac and renal diseases, and no subject has been so thoroughly discussed. That cardiac and renal diseases are often associated, and that, when there is renal disease, cardiac is very liable to go with it, cannot be denied. In chronic Bright's disease, valvular lesion is common, but you may have cardiac without renal.

A distinguished observer made the statement as late as one year ago that renal after cardiac disease is rare. This does not include passive hyperæmia of the kidney from cardiac disease. This is very common. You have a little albumen in the urine, but no casts, with the exception of a few hyaline ones. In this case the man has an intense valvular lesion. If at stages we found renal disease, it would be an interesting question which occurred first. He has not enough hypertrophy for

it (the cardiac) to occur after the renal. In those cases the heart is first hypertrophied, and, sooner or later, becomes secondarily dilated. You may not have endocarditic valvular lesions, although you hear murmurs; as, for instance, in the enlargement of the mitral orifice in cardiac dilatation from arterial sclerosis. You may even hear a murmur during life, and at the autopsy no valvular lesion is discoverable. This was first satisfactorily explained by Mahomet, who advanced the theory that the heart after death underwent contraction, and thus the abnormal size of the valvular orifice was reduced to normal, and, on applying the water test, no insufficiency could be discovered. This view is now accepted by most observers.

Chronic endocarditis from Bright's disease is rare, and is the exception to the rule. If I hear a murmur in one with Bright's disease, I am always led to the opinion that the valvular lesion is merely accidental. That you do have Bright's disease secondary to cardiac, cannot be denied, but more often the Bright's disease occurs independently of the cardiac trouble. My own view of the relationship of cardiac and Bright's disease is this: Bright's disease following cardiac is the exception; cardiac is very liable to follow Bright's disease, and especially arterio-capillary, fibrous and arterial disease. The cardiac lesions which follow these affections are those which have to do with the heart-wall, not the valves and endocardium, as hypertrophy, dilatation and the different forms of degenerations. On auscultating this man's heart, we find four murmurs, two over the aortic orifice and two over the mitral, the apex is carried well over to the left, the area of cardiac dullness is increased, but he has still considerable force in his cardiac walls, or else he is taking digitalis; the doctor informs me he is under digitalis. When he entered the hospital the heart-sounds were very feeble, he had severe dyspnœa and cyanosis, but under digitalis he has been greatly relieved. I can hardly believe that such an extensive Bright's disease preceded his cardiac. When he was in the hospital before, he had cardiac and rheumatism, but no Bright's disease, so that here you have evidence of an extensive cardiac preceding nephritis. The lungs show harsh respiration, some mucous râles and other evidence of cardiac pneumonia. The liver is very tender and somewhat enlarged, due to passive hyperæmia and some perihepatitis. As regards treatment, very little can be done for this patient; he has reached the last stage of heart disease, his cardiac wall is both dilated and the seat of degeneration, and added to this he has an extensive nephritis. I am in the habit of placing such patients on the Fothergill pill, which is composed of one grain each of calomel, squills and digitalis. In this combination the calomel unloads the portal circulation and thus lessens the work of the right heart, and also acts as an admirable diuretic when combined with the squills and digitalis. The squills acts as a diuretic, while the digitalis both sustains the heart and increases the secretion of the kidneys.

CASE OF FIBROID TUMOR OF UTERUS, TREATED BY GALVANISM.

BY A. LAPTHORN SMITH, M.D., M.R.C.S. ENG.,
Lecturer on Gynæcology in Bishop's College, Montreal.

As the opponents of Apostoli's method are continually making the statement that his disciples do not publish cases, but only say in a general way that the electrical treatment of fibroids is beneficial, I beg to submit the following very brief report of a case:

Mrs. S., aged 39 years, widow since eight years, an artist by profession, came to me on 1st January, 1889, with the following history: Began to menstruate at 13 years of age; married at 26½ years, first child nine months later, premature at five months. Eleven months later had another miscarriage at five months; fifteen months later she had another miscarriage; ten months later a child at full term, which is still living, but which she only carried to term by staying in bed four months

After the first miscarriage she had a severe attack of inflammation which confined her to her bed for ten weeks; ever since then she has suffered from dysmenorrhœa. It was during this attack of inflammation ten years ago that the existence of a fibroid tumor was discovered by a Boston physician who confined her. The diagnos was confirmed by Dr. Brown, of Montreal, a ye later. Shortly after, she came under the care the late Dr. Kennedy, who also diagnosed a fibr tumor, situated in one side. She happened to in Kingston when her last and living child v born, and she had a very severe labor, necessit ing turning and instruments. Since then she

never been free from pain during the day, and every three weeks she has been obliged to remain in bed for from one day to a week. During the last two years she has been getting much worse, and the tumor rapidly growing. She has been unable to walk down town and back, the slightest exertion, such as sweeping, compelling her to go to bed afterwards. She was liable to have nervous crises at least every month, independent of menstruation, during which she would be in bed and tremble for a day or longer, until she obtained sleep. Since seven or eight years she has had terrible headaches whenever she did any work; in fact, in order to obtain relief from pain, she would have to stay in bed all the time. She was obliged to get up six or seven times a night to pass water, and she could only evacuate her bowels with the greatest difficulty. She has had a severe pain in her side since seven years, and has not been able to wear corsets for several years; she also suffers great distress after eating. She menstruates twice every month, loses too much both times, and suffers terribly.

Local examination shows a large hard fibroid, completely encircling the uterus, filling the brim of the pelvis, and extending an inch above the umbilicus, or rather higher on the left side. It is exceedingly difficult to reach with finger, being carried backward and upwards, and it could not be drawn down. A very thin sound entered four inches with great difficulty, and only by being curved to a quarter of a circle forwards. The tumor was adherent, and could not be lifted up. There was no water in the abdomen, and not much gas; umbilical and left inguinal region very sensitive to touch.

Measurements—Waist, 30 inches; largest part of tumor 41 inches.

Treatment—3rd Jan., 50 M.,—five minutes (50 milliamperes negative for five minutes). 5th Jan., 100 M., five minutes; well borne. 7th Jan., 95 M., five minutes; pain which she had in side for eight ears left her at first treatment, and has not re-rned.

10th Jan., 100 M.,—nine minutes; able to put n her corsets for the first time in six months. as had no nervous attacks since beginning treatent; cervix uteri comes down to the lumen of e speculum easily.

2th Jan., 135 M.,—seven minutes; feeling of general well-being. 15th Jan., 150 M.,—seven minutes. 17th Jan., 145 negative, nine minutes; sound entered easily, current easily borne, and no pain whatever after application. Is now able to do a great deal of work; sleeps all night without passing water, and bowels are evacuated without straining.

18th Jan., 100 M.,—eight minutes. 22nd Jan., 110 M., eight minutes. 24th Jan., 100 M.,—ten minutes; sound enters three and a half inches. Has had no headache since beginning of treatment; walks down town and back twice a day, and does a great deal of shopping without feeling tired.

26th Jan., 150 M.,—ten minutes. 5th Feb., 100 M., ten minutes; has just menstruated, only lasted three days and was absolutely painless, being the only period she has had this month, instead of two periods a month as formerly; the quantity and quality of flow normal. Large sound enters easily three and a half inches.

Measurements. — Waist, 26¾ inches; largest part of tumor 38 inches, being a decrease of three and a quarter and three inches respectively in one month. She feels better than she did at 21 years of age, and has had no nervous attacks since beginning of treatment.

7th Feb., 100 M.,—eight minutes. 12th Feb., 75 M.,—five minutes. 14th Feb., 100 M.,—seven minutes. 16th Feb., 100 M.,—five minutes; has pain in left side since ten days. 18th Feb., 100 M.,—five minutes; pain in side gone again.

5th March, 110 M.—ten minutes; has just passed a menstrual period free from pain and just lasting three days; feels remarkably well. Edge of tumor previously hard and sharply defined, now gradually softening down and melting away.

7th March, 125 M.,—ten minutes. 9th March, 75 M.,—five minutes. 12th March, 75 M.,—ten minutes. 16th March, 130 M.,—seven minutes; without causing any pain. Abdomen can be pressed and kneaded in every part without tenderness, which she has never been free from during eight years. She weighs six pounds more than she did on the first of January, and there is marked increase of the fat in the abdominal wall and on her limbs.

19th March, 126 M.,—five minutes. 23rd March. Menstruation came on without her perceiving it, and after the proper interval; the tumor is dimin-

ishing rapidly and is now less than half its former size.

Measurements—On first of March were: waist, 26¾ inches, instead of 30; largest part of tumor, 35½, instead of 41 inches. She kindly accompanied me to the Medical Society to show the members that she was now able to overlap a cloak six inches, which she had been unable to make meet on her at Christmas. As she is symptomatically cured I have discharged her to-day, after two months and nineteen days of treatment, during which I only gave her twenty-four applications. She called in on the 24th April and 2nd May to reiterate the expression of her gratitude, and to say that she had neither pain or ache anywhere, and that she was able to withstand prolonged exertion without fatigue. I did not examine her again, but have no doubt that the tumor will entirely dissappear, as in the case of Madame D., whom I discharged cured when the tumor was reduced to the size of an orange, and in whom, six months later, no trace of it could be found.

HOT WATER IN THE MANAGEMENT OF EYE DISEASES.*

BY LEARTUS CONNOR, A.M., M.D.

Ophthalmic and Aural Surgeon to "Harper Hospital" and "Detroit Free Children's Hospital."

In the management of a morbid state in any portion of the body, three things must be considered by the intelligent practitioner, viz.: First, the feeding of the parts during a continuance of the morbid state, else death or disablement may occur from simple starvation; second, the removal in so far as possible, of the cause of the morbid state; and third, the placing of the living matter of the part, under such conditions as will most rapidly accomplish the repair of the disabled structure. The management of any disease which accomplishes these three things must be scientific, and, in the main, satisfactory.

Eye diseases are subject to the same general laws of physiology and pathology that govern the diseases of similar tissues in the rest of the body. Hence their management falls under the same general principles. Anatomical and physiological peculiarities simply modify the details of management.

All successful treatment of eye diseases is in its last analysis based upon its ability to accomplish one or more of these things. For instance, take the case of senile cataract. The morbid condition is a diseased lens (probably from starvation of the lens elements at first). However, when opaque, its management consists in its removal from the axis of vision. In doing this by extraction, care is taken that the feeding of the cornea be not shut off by too large a corneal incision, by too rough manipulation, or by an incarceration of a piece of the iris in the corneal wound. The reparative activities of the wounded parts are stimulated or assisted by the protection of the wound from all agents of inflammation, as germs, mechanical or chemical irritants, and by physiological rest to the wounded parts.

No thoughtful man will question the fact that the same principles apply to every case of eye disease. But the moment we begin to discuss the agencies by which these principles shall be applied in the treatment of any particular case or disease, divergence of opinion at once appears.

As a fact of experience, after more than ten years of careful observation and experiment, I am convinced that in the management of a large number of eye diseases, the use of hot water is a powerful agent in attaining the three things mentioned, viz.: The good feeding of the diseased tissues; the removal of morbific agents; and the promotion of healthful repair. In the brief space allotted to a paper before this body, it is impossible to present in detail the clinical evidence I have collected in support of this claim. I shall only hope to so present the matter as to induce others to give hot water a fair trial. Such trial will convince thoughtful observers that hot water deserves a more prominent place in ocular therapeutics than is usually accorded to it.

In many instances it will accomplish all that is called for in the management of slighter forms of eye troubles, as mild blepharitis, mild corneitis, especially phlyctenular, mild conjunctivitis. I have known numerous cases in which, by suggestion of one of my patients who had been taught the use of hot water, a goodly number of others had been cured of apparently similar troubles, by it alone. But of these cases I do not now speak

* Read before the Ophthalmological Section of the Ninth International Medical Congress.

farther than to suggest that in this manner the people have a safe and reliable substitute for quack remedies and nostrums, and old wives' suggestions.

In more severe and grave affections it is used in connection with such other agencies as experience has demonstrated to possess undoubted value. Thus the use of mydriatics and the local abstraction of blood are the ordinary means of combating iritis. To these are added, in cases of specific iritis, the constitutional remedies for syphilis, and in rheumatic iritis such agents as sodium salicylate, while in all cases the general health is carefully looked after. In their place these agencies are all indispensable, but in every case hot water will promote the comfort of the patient, assist in dilating the pupil, and shorten the course of the disease. In addition, there are some cases in which the other remedies have failed to cause any perceptible progress to recovery, that at once begin to improve as hot water is added to the treatment, and go on to a rapid recovery. I have witnessed this in so many cases seen in consultation, that I am sure it represents an important fact. The most skeptical will be convinced when he sees the diminished vascularity of the conjuctiva, the increased dilation of the pupil, feels the diminished tension that sometimes occurs when the deeper tissues of the eyeball are involved, and hears the grateful comments of the patient on the relief from pain and other discomfort.

Similar results are observed from the use of hot water in both catarrhal and purulent ophthalmia, in ulceration of the cornea, and in many intra-ocular troubles of great gravity. In mild forms of glaucoma, it promotes the comfort of the patient until such times as an iridectomy can be performed. In cases of acute dacrocystitis, it is a most important addition to other treatment and operative procedures. In all these cases it is a prominent factor in relieving the symptom of pain. But there are numerous other diseases of these same tissues, in which there is little, if any pain present, in which hot water is as important in promoting recovery as in those having pain as a prominent symptom. In this class are insterstitial keratitis, the trachoma, corneal opacities, intra-ocular hæmorrhage, turbid vitreous, choroidal diseases, etc. It will thus be seen that hot water is not ranked as specific for any particular disease, but only as important adjuvant to the usual management of most eye diseases. Omitting personal idiosyncrasies and conditions when its use is impracticable, there are no morbid states of the eye upon which it may not exert an influence strongly in the direction of health. This claim is based upon clinical experience, physiological experiment and well-known physiological and pathological laws.

The history of the use of hot water in the treatment of eye diseases is a meagre one. Little has been written concerning it. As a domestic remedy it has been employed from time immemorial. As such it has generally been used in the form of a poultice, and so does not constitute a hot water application in the sense that I use it. Even in the profession, it has commonly been employed by means of cloths, sponges, poultices, etc., etc. In a purely empirical manner it has found favor and disfavor during all medical history, and probably long anterior. That it did not continue in use uniformly was probably due to the fact that its mode of action had not been determined, and the means by which it was employed did not always give favorable results.

The data presented by medical history show that the divers results recorded by different observers, bore a close relationship to the method they employed in using it. It is plain that if the method was such that the water when it reached the eye was not hot, the results of using hot water could not be obtained. Farther, if sponges, cloths or other substances were employed to convey the hot water to the eyes, we would have the effect of a mechanical irritant added to those of the hot water. Besides, as these substances speedily cool, the effects of warm rather than hot water were likely to be obtained.

In the *American Journal of Medical Sciences*, October, 1881, I called attention to the value of hot water in producing a more or less permanent contraction of the blood vessels of the eye At that time I had for several years been using hot water for the definite end of producing a contraction of the blood vessels in many diseases. Since then I have continued it use for this purpose with increasing satisfaction. Step by step I learned that hot water would do more than this, and meet other important indications in managing eye diseases. Of these I shall speak presently. That there may be no misunderstanding, I will briefly explain what I mean by hot water. By

observation I found that water was hot to some persons at one hundred and ten degrees Fahr., while others would bear equally well a temperature of one hundred and fifteen; others one hundred and twenty; others still one hundred and thirty or forty. It was found, also, that when persistently used for long periods, frequently during the day, that the temperature that could be endured was progressively greater. Hence, it became evident that the actual temperature must be made to correspond to the peculiarities of the patient. In the beginning I found it convenient to direct the patient to apply the water as hot as the end of the forefinger would bear without scalding. To quiet patients' fears respecting possible injury to the eye from the hot water, I told them that the eye would not be injured by the heat of the water, unless the skin dripped from the testing forefinger. As a fact, it appeared that eyes are able generally, to bear with comfort, water much hotter than the fingers.

Quite as important as the temperature of the water, is the method by which it is to be applied to the eye. At first I directed the patient to sit with the head inclined over a large bowl of hot water, and with the hand gently throw the water against the eye, taking care that the hand itself did not touch the eye. This enabled the patient to apply hot water directly to the eye. But it soon became fatiguing in cases where it was desirable to apply it for long periods at a time, and at short intervals. It was also objectionable because of the liability of the water to be spilled, to the annoyance of all parties. It was also difficult to keep the water sufficiently hot.

For special cases I devised a large rubber bulb, holding a pint or more, and so arranged that the eye of the patient could be placed in the large opening at the top. By a tube at the top, hot water constantly entered, and the cooler water as constantly escaped at the bottom, stop-cocks controlling the flow, as was nscessary to keep the water at any desired temperature. A thermometer was immersed in the water so that the temperature could be regulated with exactness. This apparatus gave excellent results, and was used in many experiments, as well as for therapeutic purposes. The objections to it were its expense, its not being at hand when needed, and its failure to fit perfectly every variety of face, Hence for general practice it could not be made. Another method found serviceable was the construction of a clay dam on the patient's face, so that when lying flat upon the back, the filling of the dam would keep the eye entirely covered with the hot water. The water was admitted and drawn off by rubber tubes arranged in a convenient manner. A thermometer was also placed so that the temperature could be kept at a definite point, as in the preceding apparatus. In several cases of malignant gonorrhœal ophthalmia, this apparatus proved extremely useful, and, in my judgment saved the patient's eyes. Still the disadvantages of this method are insurmountable for general use. It requires too much care and intelligent watching, and so is limited to the few cases attended by proper conditions.

The last method I shall mention is free from all of these objections, and leaves little to be desired. Briefly, it consists in the application to the eye of hot water by means of a common tumbler. The glass is filled to the brim, the head slightly bent forward, and the glass so applied to the face that that a dam is formed with the face below the eye and the side of the nose, so that the eye is fully immersed in the hot water. As the mass of water in the glass is considerable, the water will remain some moments at the proper temperature. As it can be renewed in a second, it is possible, with a small amount of fatigue, to keep the eye immersed in hot water by the hour, if called for. It will be apparent that the water can be made aseptic or antiseptic, as may be desired in any special case. Clearly this method meets all the requirements for universal application, as it is inexpensive, the apparatus being found everywhere within the limits of civilization.

The use of hot water by any of the methods described is safe; without the watchful care of the physician it may not accomplish all the good possible, but it will have done no harm. The same cannot be said of other and common modes of applying moist heat to the eye. Irreparable damage often follows the application of moist heat by means of some solid substance. Among the substances employed the most common is the poultice. As a general rule, this should never be applied to a diseased eye unless under the personal observation of a physician, if it is desired to obtain the benefit of hot water. With the greatest care, it is ex-

tremely difficult to get the good effect of hot water, while avoiding the evil effects of the mode of application. In unskilled hands the most dire results are frequently witnessed. All poultices cool soon, and in such a condition they have none of the virtues of hot water, while they have the power of inducing and intensifying the very conditions which hot water tends to relieve. They dilate the blood vessels and render the circulation beneath them sluggish. Hence, if the cornea be suffering from lack of blood they still farther starve it, and so tend to the destruction of corneal tissue. The poultice in any of its numerous forms is an unsafe and unreliable means of applying hot water to the eye.

In many cases the poultice mechanically irritates an eye already in an irritated condition. This would be objectionable, if we were able to keep the temperature at the proper degree for a length of time.

The poultice is a dirty affair, inconsistent with the aseptic principles of modern surgery, especially when it is applied to surfaces which have lost any portion of their epithelial covering. In it may be countless morbific germs, and under it may be developed countless more poisonous elements.

The compress is another form of applying moist heat to the eye. It is less objectionable than the poultice, in that it causes less irritation mechanically, is less likely to get cool, and far less likely to become the carrier of morbific material. As a substitute for pure hot water it may occasionally be used, as a matter of necessity or convenience, but the results are, speaking generally, less favorable. Singularly, those who have used hot water in this form object to the use of hot compresses in acute affections of the conjunctiva and cornea, while they loudly commend their use in chronic affections of the same tissues. Apparently this is due to the fact that chronic diseases bring the eye into such a state of toleration that it will suffer less harm from the mechanical irritation of the hot mpresses. Had these observers employed hot ater in the manner suggested, they would have en quite as enthusiastic over its use in treating ute, as chronic, affections of the eye.

A form of compress, sometimes called for in the atment of ophthalmia of the new born, is made bsorbent cotton. Watched as are similar pled- s, when used to apply cold to the same class of cases, they are safe and efficient, though less so than the water alone. As they are likely to be applied by the average nurse or attendant they are dangerous in the extreme, as promotive of suppuration rather than the reverse. Especially is this true if the cornea becomes involved in the disease.

It will thus be seen that I make a marked distinction between the effects of simple hot water applied directly to the eye, and the effects when any solid substance is employed, as a poultice, compresses, etc. etc. The first I have invariably found beneficial, and never harmful, while the latter often fails to do good, and frequently does irreparable damage.

We are now ready to ask, what are the local effects of hot water applied to the eye?

My first proposition is that *hot water, causes a contraction of the blood vessels in and about the eye.* The proofs of this are many.

1. With the apparatus already described I have carefully studied the effects of hot water upon the human eye, and have always found that when applied for a sufficient length of time it bleaches the normal tissues. This can be seen in the eyelids and in the conjunctival tissues. The time required varies with different conditions and in different persons, but by regarding these it can be obtained. The longer the application is continued the longer do the effects remain when the water is removed.

2. In operation upon the eyelids and external portions of the eye, as well as during the hæmorrhage which sometimes complicates an iridectomy or injury to the eye, I have found that hot water most quickly and effectually controls the hæmorrhage. What is still better, it stays controlled, while after using cold the hæmorrhage is likely to recur speedily.

3. In cases of blepharitis, conjunctivitis, in iritis, in acute dacrocystitis and other inflammatory affections of the external portions of the eye, the same results have been observed to follow so generally that I have learned to expect them with the same certainty that I do local anæsthesia from cocaine, applied to the conjunctiva. If these do not follow I know that the hot water has not been properly applied.

4. With the ophthalmoscope I have examined many eyes before and after the local application of hot water for from ten to twenty minutes, and found uniformly that the retinal vessels were re-

duced in size. In a subjective way I first noticed this upon myself. After some very exhausting work, during an attack of indigestion, my retinal vessels became so dilated as to seriously interfere with my distinct vision. Having in my mind the properties of hot water under consideration, I placed my eyes in water a temperature of one-hundred and thirty degrees Fahr., and at the end of ten minutes the disagreeable phenomenon had disappeared. Shortly after this a gentleman applied to me for relief from a similar condition. With the ophthalmoscope I ascertained the size of the retinal vessels, and made a drawing of the same. Then I caused him to use hot water locally as described. At the end of eight minutes he affirmed that his eyes were all right. An ophthalmoscopic examination showed that the vessels were reduced to their normal size and even less. A comparison of the drawing of the vessels before and after the use of the hot water, was additional evidence of the truth of the point in question. Continued clinical observation of similar cases has given me great confidence in the power of hot water to control the action of such blood vessels of the eye as retain sufficient vitality to respond to local remedies.

5. Surgical, obstetrical and gynæcological practitioners all tell us that hot water contracts the blood vessels, checks hæmorrhage and keeps it checked. The evidence here is abundant and conclusive.

6. Dr. R. H. Murray (*Edinburgh Medical Journal*, August and September, 1886) details some very accurate studies of cold and heat upon the blood vessels of the uterus. He found that water at a temperature of from one hundred and ten to one hundred and twenty degrees Fahr., constricts blood vessels and arrests hæmorrhage from small arteries. Water at from sixty to one hundred degrees dilates small blood vessels and promotes hæmorrhage. Water at from thirty to fifty degrees checks hæmorrhage by constricting blood vessels but this only temporarily. After water at these temperatures has lost its power to contract blood vessels, water at a high temperature is still effective. From these experiments it is clear that hot water acts very promptly; that it produces a long contraction of the blood vessels; that there is an absence of vascular reaction; that there is no exhaustion following its use; and that the parts avoid all shock.

(*To be continued.*)

Correspondence.

DROWNING.

To the Editor of the CANADA LANCET.

SIR,—To settle a dispute will you kindly inform me what is the longest period of time any person was ever known to be under water, and, when brought to the surface, was resuscitated?

G. W. L.

[Dr. Aubrey Husband, in his HAND-BOOK ON FORENSIC MEDICINE, states that "few, if any persons recover who have been submerged *four minutes*, and even in cases where this time has been reached, followed by recovery, this result was probably due to the person fainting before entering the water."

The author here means to convey the impression that if the person be in a faint when entering the water, that fluid would not find its way into the stomach and lungs, and thus the process of restoration would be easier and more likely to be attended by success. It would thus appear that four minutes is the limit.—ED.]

Selected Articles.

THE TREATMENT OF LOCOMOTOR ATAXY BY SUSPENSION.

Under the above title, Dr. A. de Watteville has translated and edited the paper in which Professor Charcot describes the method of treatment of locomotor ataxy, and other spinal diseases, at the Salpêtrière, of which some account was first given in our pages in the letters on "Medical Paris of To-day." So much interest has been shown by our readers in this subject, and so many enquiries have been received, that we publish subjoined that part of Dr. de Watteville's pamphlet which relates to the practice of the methods of treatment and its details. He writes as follows:

As was to be expected, some persons have already endeavored to improve upon the method, such as, for instance, by advising the adjunction of plaster spinal supports that are, to say the least of them, entirely superfluous under the circumstances, at any rate in cases of true ataxy.

Professor Charcot has thought it advisable, therefore, to publish the following technical details, suggested by an experience acquired in the course of over 800 suspensions, practised under the supervision of his chief assistant, in the cases of forty patients. For, though the operation is, in

itself, very simple indeed, it yet requires a certain skill that is more easily acquired with the assistance of definite rules, than by the sole experience of entirely original experiments.

The apparatus used is that contrived by Sayre, of New York, for the application of plaster jackets used in cases of spinal deviation. Though pretty extensively known, we shall give a short description of the form of it used in Professor Charcot's *clinique*. A transverse piece of iron, about eighteen inches in length, is suspended by means of a central ring to the pulleys which are used to lift the patient from the ground. Each extremity of the bar ends in a hook, intended to support the ring, which carries the straps intended to give support under the armpits. Several notches on the upper-aspect of the bar serve to fix the rings from which hangs the head-piece. The latter consists mainly of two broad strips of leather, elongated oval in shape, moulded to receive the chin and the occiput respectively. These are connected above with the rings just mentioned, and are held in position by means of a strap sewn to the posterior flap, and fixed to buckles carried by the chin-piece, so as to hold the head-support in place when the patient is suspended.

Much depends upon this strap, which must be tightened enough to prevent any slipping, and yet not sufficiently to cause compression of the blood-vessels of the neck, and thereby unpleasant head-symptoms. It must be provided with a sufficient number of holes to accommodate itself to the varying thickness of the neck among those to be suspended. In case of need, which is not often, a soft body, such as lint or cotton-wool, may be inserted so as to prevent undue pressure of the strap or broad piece upon the skin. It is necessary to exercise much care in fitting the head-piece and padding, so as to suit the peculiarities of each subject. The size of the head determines the notches into which the rings of the head-piece are to be fixed, the larger the head the wider apart they must be, of course.

When the head is duly disposed of, the shoulder-pieces are slipped under the armpits. Though they may appear of minor importance, they really play the part of regulators during the period of suspension. For it is necessary that whilst lifted off the ground the patient should not be entirely supported by the head-piece, for then the
ction would become, in some cases at least,
solutely intolerable. But though the weight of
e body must be distributed upon other points,
additional support must not be so effectual as
prevent as complete an extension of the spinal
mn as possible.

ie shoulder-pieces consist of elongated cylin-
al padded cushions, terminating in straps
vided with a series of holes so as to suit, by
ropriate lengthening or shortening, the re-

quirements of each patient. This adaptation is very important; for if too short, the shoulder-pieces exercise such a pressure upon the axillary vessels and nerves as to compel the operator to bring the suspension to an abrupt and premature termination. If, on the other hand, they are too long, the traction on the structures of the neck may become too painful to be tolerated, and interfere likewise with the treatment.

Careful trials are necessary to determine the exact length of the several straps; but after three or four operations it becomes easy to decide the arrangement suitable for each case.

When all is ready, the physisian orders his assistant—with some practice he may do without one—to apply traction upon the cord, very gently and slowly, so as to avoid jerks, and to accustom gradually the muscles and ligaments to the unusual tension to which they are going to be submitted. The patient is to be cautioned not to make any movements whatever whilst he feels himself being lifted off the ground, for that would give rise to unpleasant lateral and rotatory displacements.

A soon as the toes cease to touch the floor, the operator holds the patient lightly, so as to check any oscillation or torsion of the cords, and carefully watches the number of seconds that elapse, so as to regulate minutely the length of each suspension. During this period the patient is made, at intervals of fifteen or twenty seconds, to raise his arms laterally away from the body. so as to transfer more weight upon the head-piece, and so render the traction upon, and elongation of, the vertebral column still more complete, as complete as is tolerated by each individual. Much care and vigilance is to be bestowed upon the proper performance of these abductions of the arms, both by patient and physician. As a rule, the longest time of suspension must not go beyond four minutes, three minutes being taken as the average duration. Half a minute is enough at the outset, the maximum being gradually reached during the first six or eight applications of the treatment.

Here again it is essential to take into account certain individual susceptibilities or physical peculiarities, among which stands foremost the body-weight of the patient; for whilst a person weighing from about 130 to 150 pounds may be suspended forthwith during two minutes or more, the case is quite different in the case of those whose weight reaches 180 pounds or more. In the latter, the tension to which the structures of the neck are subjected may become very severe and painful, and be felt sometimes for a whole day afterwards, an occurence which must be avoided if the treatment is to be correctly carried out.

It is well to note that certain patients have such a wish—a very natural wish—to get better, that they think themselves bound to stand any amount of pain without complaining; but this circum-

stance is positively detrimental to the success of the treatment, which must be accompanied with but trifling discomfort at the most, without real pain or fatigue, lest it should defeat its own ends.

The maximum length of the suspension must, therefore, be suited to the requirements of each patient; it is obvious that in the case of heavy persons the effect on the spine must be very thorough and effective, owing to the greater traction to which it is subjected. Suspension must not be carried out oftener than once on alternate days, otherwise it may become more hurtful than beneficial. The time of the day is indifferent, but regularity in the operations is to be observed.

When the full time has elapsed, the operator very gradually lets the rope loose, so as to avoid every trace of jerking during the descent. The patient is to be supported whilst being freed from the apparatus, and made to rest a while in an arm-chair brought near for the purpose.

The patient, before the operation, should divest himself from his coat, so as to give freedom to the arms, and his neck must be free from any pressure from the collar, so as to avoid any trouble or discomfort from the compression about the neck. Sayre's original apparatus usually comprises a moveable tripod, to the top of which the upper pulleys are fastened by means of a hook. This tripod is not to be used for suspending ataxics, who, being often deficient in power to sustain their equilibrium, are apt to seize convulsively its legs in order to steady themselves, and in so doing would knock down the whole apparatus, and injure themselves and the bystanders. As shown in the figure, the suspensory apparatus must be fixed to an iron ring firmly screwed in the ceiling.

"The results obtained by Professors Eulenberg and Mendel, at the Berlin Clinic for nervous diseases in the case of twenty ataxics, fully confirm, so far as can be judged from the comparatively recent introduction of the new treatment, the encouraging outlook sketched out in Professor Charcot's communications. The improvement observed bears chiefly upon the walking power, the equilibration, the lightning pains, and, in a few cases, the bladder troubles. Moreover, no bad symptoms whatever have been observed, even in the case of the female patients who are undergoing the regular course of suspensions. At the same time, the most sanguine observer must acknowledge that it is entirely premature to come to any definite conclusions upon a point of such deep perplexity as the question of the possibility of absolute cure in locomotor ataxy. Physician and patient alike must beware from falling into the temptation of conceiving exaggerated hopes as to the final results in the presence even of effects as incontrovertible as those testified by so many able and critical observers."

Dr. de Watteville, in an appendix, describes what he considers to be the best form of Sayre's suspension apparatus he is acquainted with in England. "The maker of it, Mr. Hawkesley (357 Oxford Street), has skilfully carried out several improvements upon the old form, in order to suit it better to the requirements of the new suspensory treatment. As a rule, Sayre's apparatus is made too slightly to bear the weight of adults,

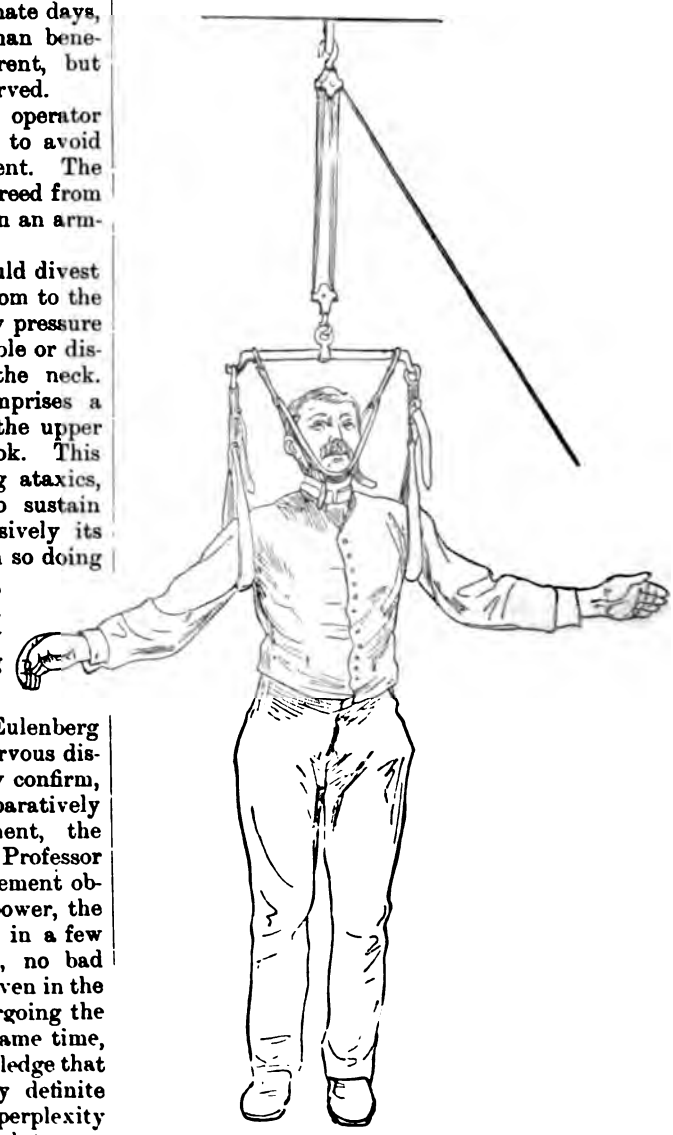

Figure showing patient suspended and performing arm movements. (As used in Paris.)

especially if they happen to be of large size. Moreover, the neck and chin pieces are not always cut so as to give comfortable rest to the part when the whole weight of the body rests upo

them. The ears often get into the way of the strap, and must be protected by leather flaps. All such points must be sedulously attended to before the treatment can be carried out fully, and success be reasonably anticipated.

"It will be noticed that I do not use any adjustment straps, and that the lengthening and shortening of the supports of the shoulder and head pieces are managed by an arrangement of strings simply pulled through a hole in an iron disc, and held in place by a contrivance well-known to sailors, I believe. The convenience of this little apparatus will be readily appreciated by everyone who tries it after the old strap system. I am personally inclined to think that the introduction of a spring balance between the pulley and the transverse bar, as shown in the figure, is an advantage. It enables the operator to ascertain the weight of the patient, and it also breaks any possible jerk whilst the patient is being lifted off or deposited upon the ground by means of the pulleys.

"I wish particularly to waive any claim on my part to innovations in these trifles, but am led to mention these details in order to facilitate the selection of an apparatus by any of my professonal brethren anxious to obtain a new one. An old-fashioned "Sayre" may, if sufficiently firm, and if managed with due care, fulfil all the indications laid down in the preceding pages; but it cannot be expected to suit all cases with equal comfort.

"I may add that I become more and more convinced that, in many cases at least, the essential road to success in the treatment by suspension is minute and personal attention on the part of the physician to all the details of the operation. It is a monstrous thing, if the report be true, that in any English hospital patients should be entrusted into the hands of mere underlings for the purpose of suspension. A trained and careful medical man should always supervise each and every performance; for, though perfectly harmless when properly carried out, I have reason to say that suspension may prove an unsafe operation if carried out in a bungling and inattentive manner, at least in the case of sensitive patients."

CHLOROFORM IN LABOR.

Unquestionably one of the greatest benefactors to womankind the world has ever known was the e Scottish physician, born at Bathgate, Linlithwshire, June 7, 1881, who died in Edinburgh, ay 6, 1870; he who was the first to apply the ew discovery of anæsthesia to midwifery practice, hich he did January 19, 1847, and was awarded 1856 the Montyon prize of 2000 francs by the nch Academy of Medicine "in consideration iis services to humanity by the introduction of esthesia into the practice of midwifery and the overy of the anæsthetic properties of chloroform," and who was, as a reward for these and other great services to his kind and the cause of science, created a baronet by his government in 1866.

Sir James Young Simpson should be the patron saint of every woman, and every man born of woman, as long as the world goes round. His name will be most loudly echoed down the corridors of time along with the greatest of the earth's great names, and if there be any reverberated upon the shores of eternity, his will surely be among the number.

Upon entering the medical profession in 1872, in consequence of association with those who were somewhat opposed to anæsthesia in labor, I for several years, in hospital and private practice, did not give my patients the benefit of this great boon. In 1878 my attention was specially called to the subject, and I investigated it thoroughly. I interrogated closely the literature and the most successful workers in this field, and became so thoroughly convinced that it was the duty of the accoucheur to give his patient the benefit of anæsthesia, that I became a devotee to the practice. I think, as has been stated by Simpson, that in midwifery practice chloroform may be regarded as more manageable and powerful, more agreeable to inhale and less excitable than ether, and as giving greater control over the superinduction of the anæsthetic state.

I cannot recall from any source a report of a death from the use of chloroform in labor.

Some of the objections to its use that have been urged are that:

1. It retards the labor.

2. It increases the tendency to postpartum hæmorrhage due to its supposed relaxing effect upon the uterine fibres.

3. It prolongs the convalescent period of the parturient woman.

4. It endangers the safety of the child.

So far as the retardation of labor is concerned, I am convinced to the contrary.

Chloroform calms the agitation and mental excitement often present in nervous women. It is conservative and conducive to the good of the patient, in that it relieves her of the spasmodic and irregular contractions which in no way advance labor, but tend to a condition of exhaustion and nervous irritability bordering upon frenzy. A pregnant woman properly cared for will have her bowels thoroughly emptied once or twice daily up to the hour of her trial. When the first preliminary pains appear she should receive a hypodermic injection of morphine, and if the first stage be prolonged, she should have administered to her one-half teaspoonful doses of bromidia every hour or two, so that a very thorough state of tranquility be secured. After the first stage has passed, and the patient has entered well into the

second stage—the latter half of it—chloroform should be administered to every case, natural or unnatural, that will consent to take it. A partial obtundity only is desired, except in operative procedure. Occasionally, indeed in the majority of cases, the administration of an ounce of spiritus frumenti every one or two hours will be an advantage.

In the administration of chloroform, we should pursue the same course we do in the use of other remedies. We should make haste slowly, carefully study the individuality and idiosyncrasy of the patient. Guard against over-susceptibilities. I have yet to find the parturient woman by whom chloroform was not received well, no matter how strong the prejudice against it previously by her family or her physician.

The observation of several cases of labor during my term of office as city physician of St. Louis, in 1875 and 1876, occurring in women who were "dead drunk" and the victims of opium narcosis, which were acomplished without interuption, together with several recently-recorded victims of hypnotism, are all arguments in favor of the thought that agents which interfere with sensation and volition do not affect unfavorably uterine contraction.

Dread and fright in the parturient are responsible for many of the accompanying dangers, and the agents above referred to materially mitigate them.

The mental tranquility secured is of great advantage.

The softening of the asperities of the accouchement is a great husbandment of the resources of the patient. Sharp and severe, though brief, pain is demoralizing to the nervous force.

Constant nagging, ineffectual, long-continued spasmodic pains are essentially exhausting, and the patient should be saved from them.

In my judgment the course outlined above is advantageous for the reasons that:

1. It adds to the pleasure and comfort of the patient and robs maternity of many of its terrors.

2. It conserves the strength and endurance, and other things being equal, the patient will more promptly recover her normal condition.

3. By its tranquilizing effects, the tendency to puerperal convulsions is more than likely greatly lessened.

4. Coupled with proper care and the administration of a drachm of Squibbs or O. W. L. ergot immediately upon the expulsion of the head, postpartum hæmorrhage is almost completely obviated.

5. Pursuing this plan the perineum is probably less liable to be ruptured.

6. The child is in no manner unfavorably affected.

During the past eleven years, I have almost, without exception, purged my patient daily during her entire pregnancy and each day thereafter, commencing within an hour after the termination of labor.

I have saved here every pain and discomfort possible during parturition, and I have during this time had not one case of puerperal convulsions or postpartum hæmorrhage. The cases have almost uniformly made rapid recoveries whether primipara or multipara.

In no case was there a fatal result.

In closing I give the following clinical report:

Mrs. X., mother of three living children, the oldest seven years old.

All her labors had been very severe, prolonged, agonizing and exhausting, and terminated with forceps. Patient stated that her physician had always said that it was impossible for her delivery to be accomplished without forceps owing to narrowness of pelvic diameter. Had never taken any anæsthetic owing to the fact that the doctor said she was not a good subject for it.

August 15, 1888, was called at midnight, the family physician being out of the city. Upon examination found Mrs. X. in the first pains of the first stage of labor. She was a snugly-built, firmly knit little woman of a probably natural weight of one hundred and thirty pounds. No evidence of special narrowing of the pelvis which I could discover. The os was just beginning to dilate, and was evidently quite rigid. Patient nervous but anxious over the prospect of her usual terrible trial and the absence of her usual medical attendant (the labor having commenced a week earlier than she had anticipated). The position of the child was a natural one.

I applied myself to the quieting of her fears, assuring her that everything was in good shape, administered a fourth of a grain of morphine, hypodermically, which had a very happy effect; instructed the nurse to give my patient a half drachm of bromidia every hour or two if she did not rest comparatively well. Went to bed in an adjoining room myself, directing that I be called when the demands became urgent. At 5 o'clock I was summoned, and examination revealed the second stage of labor well advanced. Pains regular, strong and full and satisfactory at intervals of three minutes, the patient resting and dozing between pains.

To my mind there was nothing to contraindicate chloroform, in spite of the fact state that the family physician objected to givir it to her. (I recalled the fact that the doc tor rarely gave chloroform to any one, indee was opposed to it), and so I proceeded to admin ter it to her (having first given her a toddy), on giving sufficient chloroform to render her partial insensible. Between pains she rested calmly ar slept; during the pains she "bore down" w and aided materially.

Within an hour after I was last summoned she was safely delivered of a large child—her first boy. A large dose of oil was at once administered to her. She rested quietly (having frequent naps) during the day. In the evening her bowels moved freely. She made a rapid recovery, much more so than ever before.

It is needless to say that, having so quiet and comfortable a time and an apparently brief labor, without forceps (though the child was larger than either of the other three), with a pleasant and rapid convalescence and more complete recovery than usual, this patient became a confirmed convert to chloroform in labor.—*Dr. I. N. Love in Med. Reg.*

TREATMENT OF ASCITES AND GENERAL DROPSY WITH MILK DIET.

That ascites and general dropsy very often yield to the milk diet treatment is a fact which had been recognised by the native physicians of India from a very remote age. Even in modern times many of the native physicians and quacks treat their dropsy cases in the same way, with at least partial success. They prohibit solid food of every kind, and all articles containing salt. They also prohibit the drinking of water, and make their patients take milk or curd in abundance. But there are a few particulars in connection with this treatment which they do not carefully attend to, and it is for this reason that they do not succeed in many cases. This plan of treating cases of ascites and general dropsy has not, so far as I am aware, received much attention from European physicians. The ordinary text-books say nothing on the subject. The treatment generally recommended is that by *watery* purgatives, diuretics, and diaphoretics. Paracentesis abdominis, is recommended as a last resource in cases of enormous distention, interfering with breathing, etc. The introduction of Dr. Southey's small trocar and cannula through the skin into the sub-cutaneous cellular tissue is advised in cases of general anasarca with much tension in the extremities. As for *purgatives*, we find them injurious in most cases in India. They seem to irritate the stomach and intestines of the patients, and to very much interfere with their digestion. Though an occasional purgative, by removing the accumulated ces from the intestines and by inducing secre- ons from the intestinal glands, gives great relief the general system during the course of treat- nt, we are inclined to think that a systematic e of purgative medicines, with a view to removing dropsical effusions, does more harm than good. most cases thus treated, we find that dysentery ervenes; this, in India, we look upon as a al symptom in connection with ascites or gen- dropsy.

The idea of treating ascites and general dropsy by the exclusive use of *milk diet* was first suggested to my mind by perusing an article on this subject, with illustrative cases by Dr. Richards, published in the *Medical Times and Gazette* in November, 1872. From that time I have adopted this course of treatment in a considerable number of cases, with almost uniform success. The very few failures that I met with occurred in cases where organic mischief had proceeded too far to be consistent with the maintenance of life. In such cases, I believe, no treatment of any kind is likely to do good. To avoid tiring my readers with unprofitable repetitions, I shall be satisfied with giving details of only two cases of dropsy, which completely recovered under this plan of treatment.

Case 1.—M——, a Mohamedan male, aged about forty years, and a cultivator by profession, had been suffering for a long time from repeated attacks of malarial fever. His spleen also was enormously enlarged. Later on he had ascites, and was in this state admitted into the Burdwan Charitable Hospital on Aug. 7th, 1886. His abdomen measured at midway between the umbilicus and ensiform cartilage 3. ft. 4 in., and at the umbilicus 2 ft. 10 in. His urine was acid in reaction and its specific gravity was 1015; no albumen or phosphates were discovered. He was ordered tincture of iron (fifteen minims), infusion of quassia (one ounce), digitalis powder (one grain), squills in powder (one grain), and oil of juniper (one minim), three times a day. Three pounds of milk were ordered as diet, which on the 11th was increased to four pounds and a half. On the 14th the abdomen measured at midway 3 ft., and at the umbilicus 2 ft. 9 in.; on the 27th, 2 ft. 10 in. and 2 ft. 6 in., on Sept. 1st 2 ft. 8 in. and 2 ft. 4 in.; and on the 6th, 2 ft. 5 in. and 2 ft. 4 in. At this time his abdomen attained almost the natural girth, and no more measurements were taken. His spleen, which was considerably enlarged, could now be felt very distinctly. After his dropsy was cured, he was kept in hospital a few days longer to improve his general health, and red iodide of mercury ointment was rubbed over the spleen, which diminished its size very much. The same medicine was continued throughout, except that the digitalis and squill powder were not given after the disappearance of dropsy. He was discharged completely cured on Sept. 30th, 1886.

Case. 2—S. B——, a Mohamedan female, aged about forty-five, and a labourer by profession, was admitted into the Burdwan Charity Hospital on Dec. 27th, 1887. She had been suffering from attacks of fever, off and on, for two years. She also had enlargement of the spleen, and had ascites some three months before her admission. The spleen could not be perceived for the enormous distention of the peritoneal cavity. On

Dec. 28th the abdomen measured at midway 3 ft. 2 in. and at the umbilicus 3 ft. 3. A drachm of compound jalap powder was ordered to start with, and two pounds and a half of milk were ordered as diet. The ordinary spleen mixture, containing a grain of cinchona febrifuge, five minims of dilute sulphuric acid, and half a grain of sulphate of iron, in an ounce of water, was ordered to be taken three times a day. The jalap powder was repeated on the 30th, and on the 31st the abdomen measured at midway 3 ft. 2 in., and at umbilicus 3 ft. 1 in. On Jan. 7th, 1888, the measurements were 2 ft. 8 in. and 2 ft. 9 in. The digitalis, squill, and juniper powders were also ordered from the beginning, and on the 13th her abdomen measured at midway 2 ft. 4 in., and at umbilicus 2 ft. 5 in. As the abdomen had now attained its natural size, no more measurements were taken. On the 14th she was discharged from the hospital as cured of her ascites. The same iron and quinine mixture was given to her to be taken for some time longer, with a view to get rid of the splenic enlargement.

Remarks.—The *rationale* of this treatment, as it appears to me, is founded mainly on the well-known principle of endosmosis and exosmosis. The exclusive ingestion of milk brings a very large quantity of nitrogenous material, in a safe and convenient form to the blood. It is well known that milk contains all the necessary elements of nutrition in the most easily digestible form and in proper proportion. This diet very quickly enriches the blood and thickens it in its consistence. The iron used in medicine also increases the number of red globules of the blood. The improvement of the consistence of the blood causes the greater portion of the fluid, already thrown out into the serous cavity of the peritoneum and into the cellular tissues of the body generally, to be reabsorbed and excreted by the various emunctories of the body. The kidneys, if not diseased, take the largest share in this work, and the sweat glands and intestinal glands also largely contribute to relieve the system of the excess of fluid. To help the kidneys in their action we generally prescribe digitalis, squill, and juniper powders; to help the sweat glands we prescribe warm clothing, hot bottles, etc.; and to help the intestinal glands we prescribe an occasional purgative. The main treatment is directed to the improvement of the blood by the use of very mild preparations of iron; but all these methods will fail to effect a cure if the milk diet is not given. Trials have been made with ferruginous tonics, diureties, and diaphoretics, but with no great success unless the milk diet had been strictly adhered to. I have seen many cases in hospital which do not improve, though we have been giving all the remedies enumerated; and in these cases I have often found out by investigation that the milk diet has not been strictly adhered to. The patients had stealthily taken some other solid food in lieu of the milk ordered. I admit it is difficult to induce patients to be confined entirely to milk diet; but it is the only safe course which brings on quick recovery. Another point to be carefully attended to with regard to this treatment is that the milk is to be given in very small quantities. Eight ounces of milk is generally the highest quantity I allow to the patients at a time. The dose may be repeated every three or four hours. If the digestive power is pretty strong, a little more may be allowed on each occasion. From four to six pounds of milk may be consumed during the twenty-four hours by most of the patients. The result is a quick recovery. I have seeen most hopeles cases of dropsy, which have arrived at the last stage of anæmia, quickly recover under this treatment. No doubt the iron and other remedies mentioned are also required to bring about the cure, but the exclusive milk diet being at the foundation, other required remedies will be suggested to the mind of every intelligent physician according to the circumstances of the case. I have found difficulty and delay in cases of renal dropsy, because in these we cannot make the kidneys work and drain much of the fluid. The work is done slowly by the skin and the intestinal mucous surface. Yet I have in many cases succeeded in bringing round the patients.—*K. P. Chowdhoory in Lancet.*

DYSPEPSIA.

No affection is more freqently met with in practice or more embarrassing to the young practitioner than dyspepsia. It is of daily occurrence, and so protean are its forms that the rules for treatment offered by our text-books often necessarily fail from want of directness and particularity. No doubt, much may and must be done by the proper regulation of diet. Disorders of digestion are almost invariably due to some error either in the choice, preparation, quantity, or mastication of food. When the practitioner has laid down rules for a diet that shall be plain and assimilable, yet sufficiently varied and nutritious; when he has cut off all injurious articles and regulated the times of eating and the quantity of food,—when these ends have been accomplished (his patient having proved amenable to authority in matters where obedience is specially difficult,) the required object is not far from being attained. It remains to consider what medicinial measures are indicated, and in spite of the host of new remedies for digestion our main reliance must often be still placed in acids and alkalies. Few questions are mor commonly put by the medical student, or mor guardedly answered by the man of wide expe

ence, than the following: When should we use acids and when alkalies? Many of our text-books solve the difficulty in an aphorism thus: "Acids increase alkaline secretions; alkalies increase acid secretions." Hence, if we wish to increase the flow of gastric juice (or acid secretion,) we should give alkalies; if we wish to diminish it, acids; and so on for the other secretions that take part in the processes of digestion. There is an engaging simplicity about this rule; but, while we do not deny that it may be occasionally serviceable, we doubt whether the most experienced practitioners would venture to apply it universally or with confidence. Its weakness seems to rest in this—that we can only exceptionally say that dyspepsia is wholly due to defect or excess of any *one* secretion. In its passage along the alimentary canal, the food comes in contact successively with the saliva, the gastric juice, the bile, the pancreatic juice, and the succus entericus. Of these, all except the gastric juice are alkaline secretions. As in many cases of defective digestion, several of these secretions are in all probability simultaneously affected, it is evident we are on slippery ground if we reason from the chemical action of our remedies upon one secretion only. A remedy that promotes the flow of gastric juice may diminish the flow of pancreatic juice, and so on.

Perhaps, a sounder initial principle may be found in the state of the gastric mucous membrane, rather than in the condition of any one of the digestive fluids. Where we have reason to believe that this membrane is relaxed and atonic, acids are indicated; where it is irritable and inflamed, we should prescribe alkalies, often with the addition of bismuth. Some help may be obtained from the state of the tongue, bowels, and urine. If the tongue be red and raw-looking, or covered with a thick creamy fur, acids will usually do harm, while alkalies will often prove beneficial. If, on the other hand, the tongue be soft and flabby, indented by the teeth, fairly clean in front, and with a thinnish fur behind, then acids (with or without nux vomica) will usually be found most applicable. The state of the bowels may be of some help, although no general rule is possible. With atonic dyspepsia, constipation is the rule; with irritative dyspepsia, diarrhœa. In children, diarrhœa is in a large proportion of cases due to acidity, and must be combated by alkalies. The ate of the urine must be noted, but we must oid drawing too positive conclusions from it. hus, if we find the urine loaded with lithates, id discover that these disappear on the adminisation of a few doses of an alkali, we are apt to nk that the indication for alkalies is evident. t this deduction is by no means warrantable, smuch as lithates occur in undue proportion in urine in a great variety of conditions, and may due simply to the febrile state, or to disorder of other than the digestive organs—the heart, for example. On the other hand, oxaluria is not a definite indication for either acids or alkalies, being best treated sometimes by one sometimes by the other. When sour eructations take place one or two hours after food, alkalies are always found palliative, and are in universal use. They are but seldom curative, however, in this condition, for the permanent relief of which we must look rather to dietetics or to the removal of some gouty or other taint.

When we have determined whether to use acids or alkalies a further important question remains regarding the time of their administration. On this subject a wide diversity of practice exists. Acids are given either before, with or after food, and many practitioners are much puzzled to decide which course should be preferred. If we aim definitely at improving the tonicity of of the gastric mucous membrane, there seems valid *a priori* ground for giving acids when the stomach is empty; but experience shows that in many cases acids are better borne and more useful when given either with or immediately after meals. We believe the latter was the usual practice of two such eminent therapeutists as Trosseau and Sir Robert Christison. The very wide prevalence of the practice of partaking of acid wines with food may be accepted as an indication that acids are often helpful at this time.

We do not propose the above suggestions as in any way an exhaustive analysis of a difficult therapeutic problem; but, as the question of the use of acids and alkalies is constantly cropping up in practice as in clinical teaching, any suggestions on the subject may be of some help to our readers. —*Lancet.*

THE ABORTIVE TREATMENT OF SPECIFIC FEVERS.

A little work has recently been written by Dr. C. R. Illingworth, of London, entitled "The Abortive Treatment of Specific Febrile Disorders by the Biniodide of Mercury." The contents of this brochure are hardly so pretentious as the title. Dr. Illingworth claims only that the drugs which he recommends are the most effective agents in treating the specific fevers. He does not waste time in laboring to prove any hypothesis, but contents himself with asserting that the disorders in question are caused by germs which, when acting virulently, makes exhausting depredations upon the corpuscles of the blood. The treatment, therefore, indicated, should be germicidal and hæmatinic.

The biniodide of mercury will answer every purpose as a germicide, while iron serves as a hæmatinic. Furthermore, since the abstraction of oxygen from the blood reduces also the amount of fibrin, making it more fluid, the use of ammonia,

soda, and such medicaments as lessen the fibrin-forming power of the fluid is contra-indicated.

While all the specific febrile disorders, from whooping-cough to syphilis, may be treated by the biniodide, it is in scarlet fever, diphtheria, and measles that its action is here specially described.

The biniodide is given in the form of pills, powders and mixture.

The mixture for an adult is as follows:

℞.—Sol. hydrarg. biniodid. (B. P.), ℥ j.
Potas. iodid., ʒ ss.
Syr. et aq. menth. pip., q. s. ad ℥ viij.
M.—℥ ss. q. 2, 3, or 4 h.

For a young child, from one-third to one-half of this quantity is given. The pills contain gr. $\frac{1}{16}$ gr. $\frac{1}{8}$, and gr. $\frac{1}{4}$, to be taken three times daily. For infants and young children the powders answer best, and they are made of the strength of gr. $\frac{1}{16}$, mixed with sugar, and taken three times daily.

In the treatment of mild cases of scarlet fever the patient is given gt. ss. to gt. j. of perchloride of iron, with gr. ij. of chlorate of potash, every two or three hours, and biniodide three times daily. When there is very great disturbance of the stomach, the acetate of ammonia, or salicylate of soda, may be added to the above for a time.

Local treatment at the same time is imperative. This consists in the application to the throat of a solution made as follows: Add ten minims of a 1 in 4 solution of potassic or sodic iodide to ℥ jss of a 1 in 500 solution of the bichloride of mercury and sweeten to ʒ ij. with pure glycerin. This makes a red mixture, in which the biniodide forms a fine red precipitate suspended in glycerin. In those cases in which the binoidide mixture is vomited, a combination of bismuth, carbolic and hydrocyanic acids answers well, while the biniodide is given in powdered form.

In the malignant form of scarlet fever, Dr. Illingworth follows the usual practice. He increases the amount of iron in its astringent forms, adds alcoholic stimulants, and gives the biniodide as usual. He wisely advises against the use of antipyrectics, such as antipyrin, antifebrin, or aconite. The biniodide has also proved an efficient prophylactic. The biniodide treatment of diphtheria is much the same as that for malignant scarlet fever. The same treatment is "signally efficacious" in whooping-cough. The criticism which would be made of Dr. Illingworth's biniodide treatment is, that it is not a biniodide treatment at all, but might just as well be called the iron and potash treatment. How much of good effect comes from the germicide is a question very far from being settled by the evidence Dr. Illingworth gives us.—*Med. Rec,*

FALSTAFF'S DEATH-BED.—In *Blackwood* for March appears an able article from the pen of Dr. Creighton, on the correct reading of that much-disputed passage in Dame Quickly's report of Falstaff's death, "His nose was as sharp as a pen, and 'a babbled of green fields," and which Dr. Creighton would have us read, "His nose was as sharp as a pen on a table of green frieze," and supports this emendation with considerable force and learning. According to Dr. Creighton, Shakespeare made Falstaff die of the sweating sickness: first, because in the epilogue to the second part of "Henry IV." he promises that he shall die of "a sweat;" secondly, because many of the symptoms of death, as noticed by Mrs. Quickly, correspond with those given by Caius in his "Boke of Counseil against the sweat;" and lastly, because the skin in "the sweat" often assumed a pimply roughness, which at first would be of a turgid and red tinge, but as the cadaveric hue of death came on would become *chlorotic* or greenish: in fact, the colloquial name given to the sweating sickness later on, in Germany, was *der Eriesel.* The arguments in favor of the older reading are, briefly, that the sweating sickness did not make its appearance till more than seventy years later; that had Shakespeare really intended to represent Falstaff as dying of that disorder he would have said "the sweat," instead of "a sweat." Moreover, it is not natural to make Mrs. Quickly such a minute clinical observer; whilst the picture of the drawn features and the childish and innocent babblings of the old sinner's delirium is one of those powerful touches that the poet delighted to draw. Besides, there was no necessity to make Falstaff die of an accurate disease when Shakespeare had already represented him as suffering under a complication of disorders, with symptoms so graphically described that we can readily diagnose his disease. The Chief Justice, addressing Falstaff, says: "Have you not a moist eye, a dry hand, a yellow cheek, a white beard, a decreasing leg, an increasing belly?" &c.: the yellow cheek, the increasing swelling of the belly, with the shrunken limbs, telling of the onset of the jaundice, and the ascites which accompany the later stage of cirrhosis of the liver. Nor are the presages of his death incompatible with this view: the burning heats succeeded by sensations of intense cold, the rambling delirium, and pinched features are characteristic of death by this disease. But whichever reading may ultimatel be adopted by the critics—and the question is sur of securing ample discussion,—we must feel indet ed to Dr. Creighton for introducing the subjec and giving us an intellectual treat in the scholar manner in which he has arranged his facts.—*Lancet.*

THE TANNIN TREATMENT OF PHTHISIS IN BRSELS.—Dr. F. House, of the Hospital St. Je

Brussels, after having tried the tannin treatment on all his phthisical patients for the last year and eight months states as the result of his observations that it gives excellent results in all stages of the disease, and especially in the condition where cavities exist. Indeed, he has no hesitation in declaring that of all the different kinds of treatment for phthisis which he has tried this has given by far the most encouraging results. The dose he employs ordinarily is fifteen grains, which quantity is taken three times a day. It is, as a rule, well borne; where this is not so, it is ordered to be taken with meals. After the first few days the expectoration and the sweats diminish, the cough decreases, and in many cases the appetite undergoes a marked improvement. The majority of the patients suffered from some slight degree of constipation, though in some this feature was sufficiently marked to require treatment; while others, again, suffered from diarrhœa. The character of the expectoration changed for the better, the sputa becoming white and frothy instead of green and firm. In some cases the diminution of the expectoration was followed by increased dryness of the cough, so that the patients complained that it fatigued them more; this was easily remedied by prescribing a few spoonfuls of syrup of codeia. The physical signs underwent a remarkable change for the better, at least those depending on auscultation, moist rales giving place to dry rhonchi, and large gurgling rales decreasing progressively until they gave place to mere blowing respiration. These changes were evidently due to the drying up of the cavities, in consequence of which the hectic present in many of the cases vanished, the patients increasing considerably in weight and gaining strength in a remarkable manner. The percussion signs were not found to undergo so marked a change as those dependent on auscultation, but even here some improvement could be detected. No bacteriological observations were made.—*Lancet.*

THE DISAPPEARANCE OF CARDIAC MURMURS.—Dr. M. A. Boyd, of Dublin, at a recent meeting of the Royal Academy of Medicine in Ireland, read a paper on the disappearance of cardiac murmurs which have existed sufficiently long, and have led to such changes in the cardiac walls as to be considered organic in character. Such disappearing murmurs are generally consecutive to ıte rheumatic endocarditis; cases also occur of ·onic endocardial changes which ultimately ve the heart free from all traces of disease. . Boyd gave three instances of cases under his n observation—one the murmur of mitral re·gitation, with consecutive changes in the left ıtricle and auricle, which existed for two years, l ultimately disappeared, as did the hypertro· associated with it; and two others of aortic ·rgitation existing for a considerable period, which finally got quite well also. In both these latter cases the existence of hypertrophy and dilatation of the ventricle might be taken as sufficient evidence that they were of a permanent nature, as also the length of time they continued after the primary endocarditis. A well-established constrictive murmur, in his opinion, never gets well; it may disappear or cease to be heard, owing to failure or weakness of the cardiac walls, or to excessive dilatation of either of these or the aorta, but the symptoms associated with it remain, and *post-mortem* evidence shows no cure. Plastic material deposited on or in valves, may ultimately get absorbed when it only interferes with their adaptation, but when deposited around the margin of an orifice it must ultimately, by its contraction, cause obstruction. Such absorption is most likely to take place in young subjects, owing to the rapid metabolic changes which occur in their tissues and to compensation being more easily established; and is more frequent where the valvulitis is rheumatic than where it is the result of alcoholism, gout, or contracted kidney.—*Med. Press.*

AN EARLY SIGN OF ENDOCARDITIS.—Dr. Duclos, of Tours, writing *Rev. Gén. de Clin. et de Thérap.* records a fact of his experience, in regard to commencing endocarditis, which may possibly be of value as an aid in the early recognition of this affection. While in charge of a military hospital he chanced to have a large number of young soldiers suffering from acute articular rheumatism under his care. One day, while listening to the heart-sounds of one of his patients, his finger bearing at the same time on the radial pulse, he was struck with the want of synchronism between the ventricular contraction and the pulsation at the wrist, the latter being delayed about two-thirds of a second. The following day a systolic apex murmur was heard. Thinking that this retardation of the radial pulse might have some significance in connection with the subsequent development of endocarditis, he took pains to note its occurrence in other cases, and found that it was followed by a murmur at the end of from twenty-four to thirty-six hours in every instance. These observations were extended over a period of several years, and were confirmed in a number of cases by Professors Parrot and Potain.

The author has no conclusive theory to offer in explanation of this phenomenon, but he thinks that it is probably due to a weakening of the muscular fibres subjacent to the endocardium. He compares it to the weakened respiratory murmur frequently observed at the beginning of a pleurisy a few hours before a friction sound is developed or effusion takes place. It would be interesting to learn whether this want of want of synchronism is present in the beginning of endocarditis arising in the course of other diseases, but the author has few

observations bearing on this point to record. He has noted it, howevrr, in two cases of typhoid fever and in three of erysipelas, in which endocarditis, subsequently developed.

Dr. Duclos draws some practical conclusions, in regard to treatment, based upon the early recognition of the affection, and he believes that he has succeeded in arresting the disease, in certain cases, before irreparable injury had resulted. His plan is to apply immediately a large flying blister over the præcordial region, or, in default of this, a mustard-plaster, dry cups, or leeches. He increases also the dose of the remedy that is being at the same time given for the rheumatism. Of course, a strict enforcement of recumbency is also indicated.

When we consider the importance of an early diagnosis of endocarditis, and the possibility of arresting the disease if detected in its incipiency, this alleged premonitory symptom of the affection is worth testing in order to determine the amount of practical utility that it may possess.—*Med. Rec.*

NEW PROCEDURE IN ANTICIPATED COMPLETE RUPTURE OF THE PERINEUM.—At a meeting of the Chicago Gynecological Society, Nov. 16, 1888, Dr. Edward B. Weston read a paper entitled, A New Procedure in cases of Anticipated Complete Rupture of the Perineum, in which he said that on the fourth day of last October he was for the fourth time, called to attend Mrs. H. in labor. The patient was a woman somewhat below the average size, and had rather a narrow pelvis, while her children were all large at birth. At the birth of her first child, a boy who weighed twelve pounds, a complete laceration of the perineum was received. The second child, also a boy, weighed nine and one half pounds, and the perineum was torn to the anal sphincter. The third pregnancy was terminated in the sixth month by unknown cause. The child was of course small, but delivery took place very rapidly, and there was again a rupture, though not to the same degree as in the second labor. On visiting the patient at the beginning of her last labor an examination showed a well-restored perineum, a child and seemingly very large, presenting in the first position.

On meditating over the situation, remembering what had taken place in her previous labors, Dr. Weston feared a complete rupture would again occur, however well he might apply the various methods or procedures for protecting the perineum. The thought came to him that it would be well to introduce a deep suture before the laceration occurred, and before the head began to press upon the perineum, so that if complete rupture did take place he would have one suture already in place, by means of which he could easily bring the parts into accurate apposition, and which could, in a measure, be used as forceps, or tenaculum, and be of great service in whatever after-operation might be necessary. He therefore with a long curved needle introduced a silk suture a little more than half an inch to the right of the anus, and carried it up about an inch and a half in the recto-vaginal septum, and brought it out on the left side at a point corresponding to its point of entrance. Each end was left six inches long and then tied together. Again there was a laceration, though not a complete one. The child, a boy, weighed eleven pounds.

In the discussion that followed the reading of the paper most of the speakers agreed that the procedure instituted by Dr. Weston was a proper and valuable one as simplifying the primary operation for rupture of the perineum.—*Am. Jour. of Obstet.*

A HINT FOR FACILITATING THE MICROSCOPICAL EXAMINATION OF URINE.—When attempting to examine urine under the microscope for casts, epithelial cells, and other organic bodies, a good deal of annoyance and difficulty is sometimes caused both by urates and also, when the specimen is not quite fresh, by fermentation and putrefactive products. In order to obviate this difficulty, and with the further view of preserving the specimen, Dr. M. Wendringer advises that the urine should be mixed with a nearly saturated solution of borax and boracic acid. This dissolves the urates and keeps the urine from fermenting, and at the same time exercises no destructive effect upon the casts and epithelial elements which it is desired to examine. The solution is prepared by mixing 12 parts of powdered borax in 100 parts of hot water, and then adding a similar quantity of boracic acid, stirring the mixture well. It is filtered while hot. On long standing a small deposit crystallises out, but clings to the side of the vessel, so that it does not interfere with the transparency of the liquid. The urine to be examined is put into a conical glass, and from a fifth to a third of its bulk of the boracic solution added to it and agitated with it. The urine will be found to become clear in a short time—*i.e.*, if there is no cloudiness due to bacteria; and it will remain unchanged for several days. If it is only wanted to clear the urine and to make it keep for a day or two, the addition of a smaller quantity of the boracic solution is sufficient. If a third of its bulk is added, no fermentation or putrefactive processes take place, even if the glass is left uncovered in warm places. Albumen, too, if it exist is not coagulated. The organic elements—a epithelial cells, casts, blood corpuscles, etc.—co' lect so quickly, without undergoing any morphc logical change at the bottom of the glass, tha the first drop taken up by the pipette usual' proves a satisfactory specimen.—*Lancet.*

ACCIDENTAL RASHES IN TYPHOID FEVER.—In a paper upon this subject read before the Section of Medicine of the Royal Academy of Medicine in Ireland, Dr. John William Moore sums up his conclusions as follows :

1. Not infrequently, in the course of typhoid fever, an adventitious eruption occurs, either miliary, urticarious, or erythematous.

2. When this happens, a wrong diagnosis of typus, measles, or scarlatina respectively may be made, if account is not taken of the other objective and subjective symptoms of these diseases.

3. The erythematous rash is the most puzzling of all ; but the prodromata of scarlet fever are absent, nor is the typical course of that disease observed.

4. This erythema scarlatiniforme is most likely to show itself at the end of the first, or in the third, week of typhoid fever.

5. In the former case, it probably depends on a reactive inhibition of the vaso-motor system of nerves ; in the latter, on septicæmia, or secondary blood-poisoning ; or both these causes may be present together.

6. The cases in which this rash appears are often severe ; but its development is important rather from a diagnostic than from a prognostic point of view.

7. Hence, no special line of treatment is required beyond that already employed for the safe conduct of the patient through the fever.—*Dublin Jour. of Med. Science.*

HYPODERMIC INJECTIONS OF ERGOT IN FACIAL NEURALGIA.—For the relief of facial neuralgia hypodermic injections of ergot are incomparably superior to aconite or gelsemium. Any one who has used it well never resort to either of the above-named remedies. I have used it the last six years and have never had it fail in but one case. In that case there was evidently organic disease. Ordinarily one injection relieves the pain permanently. Sometimes two, and in one very severe and obstinate case which had gone through the hands of several physicians without relief, it required three. After the third injection he never had a twinge of pain. I put it in the temple, as nearly over the seat of pain as convenient I use the plain extract, and have it made on purpose for ypodermic use. One minim represents two grains ergot. Of this I use from eight to twelve inims, blood-warm, at one injection, and without luting. In order to make this a success, two ngs are essential. One is, to have a fresh and re article of ergot to make the extract from, and e other is, to have the extract reasonably fresh. kept long, it is not only worthless, but irritating. hen properly prepared and fresh, it produces re or less pain for ten or fifteen minutes, and when the pain from the injection subsides the neuralgia is usually gone, and does not return.

I have used this treatment for sciatica and other forms of neuralgia, but not with very satisfactory results.—Dr. Stewart in *Peoria Med. Mo.*

A SUPPOSED BACILLUS OF CANCER.—Professor Platon I Kübasoff, of Moscow, has carried out a long series of bacteriological researches on malignant (cancerous) new growths, and has arrived at the following conclusions : 1. The disease is caused by a special pathogenic rod-shaped microbe. 2. The bacilli have slightly ovoid outlines, and are arranged mostly in pairs and little heaps, their length amounting to one-fourth of the diameter of a red blood corpuscle. 3. In a pure cultivation the rods grow best on coagulated blood-serum at the body temperature. 4. When inoculated under the skin in animals, the microbe gives rise to a cancerous degeneration, commencing in the nearest lymphatic glands, and subsequently spreading to the internal organs, especially to the mesenteric glands, omentum, liver, and pericardium. In all the organs genuine cancerous nodules are formed. 5. Of lower animals, rabbits and cats prove to be most sensitive in regard to the bacterium. When inoculated they die in one or two months from cachexy, with generalisation of cancerous foci all over the body. All cancers (of any variety and any organs) seem to be caused by one and the same bacillus.—*Br. Med. Jour.*

ACETATE OF LEAD IN CHAPPED NIPPLES.—In the Moscow weekly *Novosti Terapii*, Dr. A. Nesvitzky asserts that he treats, with invariably successful results, all cases of chapped nipple by the local application of the following ointment :

℞.—Plumbi acetat, . . . gr. iv.
Solve in aq. destil, . . . ℥ss.
Deinde adde ceræ flavæ, . ℥jiss.
Vaselinæ flavæ, ... ℥j.

M. D. S.—Spread a layer as thick as a table knife's back over a piece of soft linen, and cover the parts.

The dressing should be changed every day. A considerable relief is said to be felt even after the first twenty-four hours, fissures, excoriations, etc., healing fairly rapidly. The same ointment is employed by Dr. Nesvitzky with similar success in painful induration of the mammary gland during lactation.

LEARNING TO THINK.—In every-day life no fact is more noticeable than the inability of many persons to do their own thinking, even in matters and upon lines wholly within the range of their intelligence. They will see a point that is suggested to them, and will at once understand its bearing on some matter in hand ; but they do not seem to have the faculty or art of raising points for them-

selves, and consequently their action is not as intelligent as it might be. If given a rule to work by, they will apply it, not only in season but out of season, and will look amazed if one suggests that, under special circumstances, they should have varied their usual procedure. Every employer and overseer of labor knows to what an extent this is the case. It is the exceptional workman who really thinks, and who can therefore be trusted to suit his action to circumstances. And so in nearly every sphere of life, a kind of automatism seems to be the rule, and intelligent self-direction, in the light of present facts, more or less the exception. One is, therefore, tempted to ask whether in connection with our system of education, some gymnastic might not be devised for the special purpose of teaching the rising generation to think. —*Popular Science.*

IS APOMORPHINE A SAFE EMETIC?—Dr. John Brown, of Bacup, asks the important question: Is apomorphine a safe emetic? and gives a brief account of his further experience of this drug. There are few, if any, of the new remedies introduced into the Pharmacopœia that in his opinion have sustained their reputation with such unvarying success, and with so few failures, as apomorphine. Dr. Brown prepares his own solution of apomorphine as follows: Apomorphinæ Hydrochlor. gr. i.; Sp. Vini Rect. ℥ xx.; Aquæ ℥ c. Each 10 minims equals one-twelfth of a grain of apomorphine. The average interval between the hypodermic injection and the emesis is about ten minutes. As a rule, the vomiting only occurs two or three times at short intervals. The depression is but what might be expected after ordinary vomiting. He has observed no case approaching fatal or even serious collapse. Only two of the cases were adults, the others were very young children. He believes that there is no emetic so safe, certain and quick for children. In adults ordinary emetics usually succeed; not so in children. The cases reported in which collapse occurred were adults.—*Brit. Med. Jour.*

CARBOLIC ACID AND IODINE IN WHOOPING-COUGH.—Dr. Rothe, having met with some unfortunate cases of whooping-cough treated with antipyrin, turned his attention to a combination of iodine with carbolic acid in the treatment of this affection, and with this combination he has obtained excellent results. He has, he says, treated hundreds of cases, and cannot remember one in which the affection lasted longer than four weeks, besides which no fatal case occurred. The mixture he employs is as follows: acid carbol. 15 gr.; sp. vin., 15 ℥.; tinct. iod., 10 gtt.; tinct. bellad., 30 ℥.; aq. menth. pip, 2 oz.; syr. opiat., 150 gr. A teaspoonful of this is given to children over two years of age every two hours. When this treatment was carried out from the commencement of the complaint the severity was never great, and even when it was only begun in cases that had been going on for six or seven weeks it soon cut them short.—*Lancet.*

TREATMENT OF HERPES ZOSTER.—Dr Allan Jamieson treats this disease in the following manner: (*St. Louis Med. and Surg. Jour.*) He applies locally a protective coat of elastic collodion. Internally he administers the following:

℞.—Tinct. nucis vomicæ,
Tinct. gelesemii, āā, . gtt. x.
—M.

If there still remains local pains after the cure of the trouble, the following lotion is ordered:

℞.—Menthol, ... ℥j.
Alcoholis, ... ℥jv.
—M.

Should this not relieve the condition, galvinism should be resorted to, the current being caused to pass along the tract of the nerve, by placing one pole at the spinal column and the other at the painful parts.

UTERINE STYPTIC.—John Adderley, M. D., Skibbereen, County Cork, Ireland, says: It gives me great pleasure to add my testimony to the great value of S. H. Kennedy's Extract of Pinus Canadensis, which I consider a most valuable uterine styptic, seeming not only to possess the power of arresting uterine hæmorrhage, but also to produce a healthy action of the parts. I used it with a patient who had been suffering for a number of years from menorrhagia, depending upon ulceration of the os and cervix uteri, with whom I had tried all other remedies for menorrhagia, lasting during a period of five months almost without intermission. Extract of Pinus Canadensis applied to the os uteri on cotton wool, and also used as a lotion arrested the hæmorrhage immediately, and the Aletris Cordial, which was taken internally, helped to invigorate the system and promote a cure which I had at one time considered incurable. I should not wish to be without these remedies in similar cases, and shall continue the use of them in my practice, as I consider they gave most satisfactory results.

THE POST-MORTEM WARTS, says Dr. Wm. Osl are now pretty generally regarded as local tuberc the result of inoculation. The presence of bac has been demonstrated in several instances. T tubercles consists chiefly of granulation tiss occasionally with giant-cells, and with papillo tous outgrowths of the epidermis, which gives t tubercle the wart-like character. They are i with in persons who perform many post-morte and in those whose business brings them into c

contact with animals and animal products. Their occurrence is by no means infrequent. In Germany it is quite common to see the hands of the demonstrators of pathology (and more especially the attendants in the autopsy-rooms) disfigured by these structures. Mr. Hutchinson considers these warts a form of lupus.—*Med. Rec.*

ETIOLOGY OF CANCER.—The first long address in this year's Surgical Congress at Berlin was delivered by Professor von Esmarch, of Kiel, on the subject of the Etiology and Diagnosis of Carcinoma, more particularly of the Tongue and Lip. The speaker pointed out that in all parts of the body, but with especial frequency on the tongue and lip, there occurred ulcerating tumors resembling cancer (syphilomata, tubercles, and actinomycotic masses), which naturally required different treatment from that used in cancer. As the latter should always be removed as early and as thoroughly as possible, and severe mutilating operations are often necessary for that purpose, it is of the utmost importance that an anatomical diagnosis should be made before operating. In most cases this can be done with certainty by microscopic examination. In order to procure the necessary material for examination, the surgeon should not recoil even from severe operations. Exploratory puncture, scraping, excision of large pieces, laryngotomy, laparotomy, trephining, suprapubic cystotomy, forcible dilatation of the rectum or urethra, belong to this category. Syphilomata are most frequently the occasion of error. They occur frequently on the tongue and also on the lips. Their late appearance, often after a period of latency extending to many years, makes the diagnosis difficult. If, in such cases, the anatomical examination supplies no positive proof that the disease is cancerous, and if, at the same time, there is no evidence of tubercle or actinomycosis, a diagnosis of syphiloma must be made in the first place, even if no other signs of inherited or acquired syphilis are present. These are the cases in which diagnostic inferences may be drawn from the success or failure of treatment. Antisyphilitic treatment must be energetically carried out. In cases of tuberculosis and actinomycosis, the diagnosis will be confirmed by means of the microscope. With regard to causation, in the case of carcinoma, some sources of irritation may be discovered; these may have occurred but once, as in injuries, may be persistent, such as foreign bodies, t, tobacco, paraffin, etc. It is well known that ignant tumors originate in scars; old ulcers of leg, or stomach, and syphilitic sores may deerate later on. Benign growths may also be ıe transformed into malignant tumors, for mple, warts, nævi, etc. Chronic conditions sing irritation of the mucous membrane, or of kin may give rise to the devolopment of malignant growths, for example, leukoplakia, eczema, etc. With regard to the theory of their origin, Cohnheim's hypothesis, that it is due to the persistence of embryonic germs, is untenable. There is as yet no proof that cancer is an infective disease, and it is by no means probable that it is so. One has always to come back to the assumption that a certain predisposition, some diminution in the power of resistance of the tissues, is a ne c sary factor. Without this, it is impossible to explain how it is that in the great majority of cases in which causes of irritation exist, cancer does not become developed. One is inclined to look upon the predisposition as inherited, without being able to get any further. It may also be said that the tendency to the formation of tumors depends on the tendency of certain tissues to become thickened. By thickening of the connective tissue, especially of that of the vessel-walls, sarcomata are produced; whilst carcinomata arise from thickening of the epithelium. The extension of this thickening into the neighboring tissues seems to be dependent on weakness of the latter. Cancer originates in overgrowth of the epithelium in the connective tissue inflamed, and thereby weakened. Perhaps the development of sarcoma on a syphilitic basis may serve to elucidate the origin of malignant tumors in general. Old, badly-treated syphilis leaves behind a tendency to thickening of the connective tissue. As the result of irritation of any kind, tumors such as sarcoma, fibrona, etc., may become developed in this thickening. These frequently disappear spontaneously, and are often curable by internal medication. Most of them, however, recur after extirpation, and they may also become generalized by metastasis, like the most malignant cancers. Such tumors, really dependent on syphilis, often first appear after long years of complete latency. In many other cases, in which infection can be excluded with certainty, the possibility of inherited syphilis must be borne in mind. The patient's ancestors must also be proved to have been free from syphilis. It is well known that many morbid tendencies which are inherited skip one or two generations in transmission, as, for example, gout, hæmophilia, etc. In the same way, syphilis may also skip one or more generations. It must be borne in mind that syphilis is extremely diffused. A large number of familiar diseases, all of which had this characteristic in common that they produced destructive ulcers in the skin by the breaking down of thickened connective tissue, disappeared before their syphilitic nature was recognized and appropriate treatment could be applied. It is, therefore, not beyond the limits of possibility that even among men now living there may be a tendency to thickening of connective tissue which has been handed down from bygone generations. Whether the tendency to epithelial thickening is to be explained in the

same way, more extensive investigation is required to show. One can only agree with Billroth that, up to the present, the most laborious statistics have thrown no light on its etiology.

IRRIGATION OF THE PUERPERAL UTERUS.—Dr. Haynes concludes a discussion of this subject thus:

1. Where intra-uterine irrigation is used in the absence of sepsis, use no sublimate, but plain hot water, or salt and water.

2. If the urine is albuminous and scanty, use no mercury.

3. If the urine is slightly albuminous and copious, or if the patient is profoundly anemic, do not use more than a pint of a solution of 1:8,000.

4. Always use tartaric acid and sublimate lablets or powders; dissolve thoroughly in a small quantity of water and mix carefully with a definite quantity of hot water in a pitcher, from which pour into the irrigator.

5. Always use fountain syringe, and for the uterus a double table, so as to insure the return of the solution. If for any reason the fluid fails to run out as fast as it flows in (if not through the reflex tube, by way of the channels at its sides), shut off the flow. The irrigator should not be raised more than three feet.

6. Precede by copious irrigation with hot water to wash out blood, etc., which may form with sublimate adhesive albuminous compounds, which may in time be absorbed. Follow by a quart or two of hot water to insure the evacuation of all the sublimate solution.

7. For the uterus use a solution not stronger than 1:8,000 and not more than a quart daily.

8. For the vagina use a solution not stronger than 1:4,000 and not more than a quart twice daily.

Irrigation used in the above way is, we believe, a practice almost devoid of danger. We have made more than one hundred and seventy-five irrigations with the double tube and fountain syringe, with no untoward results except in two cases an unimportant rise of temperature, and in one a severe but harmless chill, and even these slight accidents we feel certain might have been avoided by greater care. Yet irrigation of the puerperal uterus will always be a procedure requiring great care and judgment and some skill.

Enough has been said to make it evident that our opinion coincides with that of Crede and Fehing, that *both vaginal and uterine irrigation are attended with undoubted dangers, and should never be employed in the puerperal state unless to meet definite indications.—Amer. Jour. Obstet.*

THE NATURE OF TETANUS.—The prolonged reading of the subject introduced by Professor Verneuil at the Academy of Medicine, on the nature of tetanus, has been brought to a close. Besides the equine and telluric origin of tetanus, M. Verneuil believes also in the contagiousness of this malady, which may be effected by the dust floating in the air, or even by flies, as in the case of charbon. He cited a case in support of this last conjecture, without pretending, however, to arrive at a positive conclusion. In fact, M. Verneuil gives the preference to the equine origin of tetanus. In support of his thesis, he cites a statistic of about 380 cases. Of this number, 222 relate to individuals whose profession put them in constant relation with the horse (farmers, coachmen, stablemen, etc.), or fifty-eight per cent. As for the other cases, the equine origin of the malady, which may not appear so evident, is none the less real. For instance, three medical men, who died from tetanus, had horses which they looked after themselves, and a beadle, whose profession has nothing in common with that of the stableman, contracted the disease after having during a whole day, with a wound in the hand, transported manure from one place to another. As regards the telluric origin of tetanus, M. Verneuil sees in the earth only an intermediate agent between the horse and man. The soil impregnated with the dejections of the horse would be noxious; ordinary soil would not be so. Thus it was that in the extensive works executed at the port of Boulogne, and where not a single horse was employed, not one case of tetanus was observed, although the wounds incurred by the workmen were numerous. Professor Verneuil concluded his communication by insisting on the means that should be taken to prevent the development of this malady. As it is now admitted to be contagious and microbian, all the articles that have been in contact with tetanic patients should be completely disinfected. A person wounded should never sleep in the bed previously occupied by a tetanic patient, without disinfection having been absolutely carried out. The equine origin of the malady being also established, the prophylactic measures should not be confined to man, but they should be applied also to horses. He recommends that the most energetic means should be employed, and he proposes not only the disinfection, but also the destruction of objects which, like the harness for instance, that had been used on tetanic horses, might contain the microbe of tetanus.—*Paris Correspondent Med. Rec.*

CEREBRO-SPINAL MENINGITIS.—Cases of cerebro spinal meningitis, which used to be quite rare here have become much more numerous of late; and as this generally fatal disease is now understood to be infectious, the Berlin police are about to take measures to prevent it from spreading. On and after May 1st next, every physician will be required to report any case occurring in his pr-

tice without delay to the Royal Sanitary Commission. So far as possible patients are to be isolated. Children of families in which there are cases, are to be kept from school till the danger of infection be medically certified as past. The sick-rooms, the linen and cotton articles, especially the handkerchiefs used by the patients, their clothes, etc., are to be thoroughly cleansed and disinfected. These regulations will be enforced by penalties.

INFECTION OF AN INFANT THROUGH THE MILK OF A TUBERCULOUS NURSE.—Dr. Steigenberger, of Buda-Pesth, has recorded a case of tubercular infection through the nurse's milk in the *Pesther medicinisch-chirurgische Presse*. The facts of this interesting case are summarized as follows: An infant, aged five months, of healthy parentage, developed caseating cervical, glandular abscesses, of a distinctly tubercular kind. Microscopical examination verified the macroscopical diagnosis. Inquiry elicited the fact that the infant had been nursed, for a period of four weeks, by a woman who had to be discharged on account of phthisis, with abundant expectoration. The etiological relationship was thus clearly established.

The infection of human beings through the milk of tuberculous animals has been repeatedly shown, and there is, of course, no reason why the human milk should not carry with it the same pathogenetic power. But, so far as we are aware, the above case is the first instance in which this method of transmission has been actually observed to occur. The inference is obvious, namely to exercise the greatest possible amount of care in the selection of wet-nurses.—*Med. Rec.*

DIGITALIS IN THE TREATMENT OF PNEUMONIA.—In this disease digitalis acts on the factor of fever, which in pneumonia is often the most prominent symptom. It also circumscribes the area of disease in the lungs, but the main indications for its use are to be found in the constitutional disturbance. In an uncomplicated case of pneumonia, it should be given whenever the pulse exceeds one hundred, irrespective of the extent of the pulmonary lesion. It should be borne in mind that in fatal cases death supervenes between the eighth and tenth day, and digitalis attains its maximum effect from the seventh to the tenth day. It is therefore necessary to prescribe the drug not later than the third day.—*Cincinatti Lancet-Clinic.*

MUST NOT HAVE SPECIALTY ON CARD.—The American Association of Genito-Urinary Surgeons rules that it will not consider the application for membership from one who on his card states that he is a Genito-Urinary Surgeon. He can do this in connection with his papers in the medical journals, and with the reprints of the same, in the announcements of the dispensaries, etc., with which he is connected. By these means he can advertise his specialty among the people and the profession, but he must not do the same thing with his cards.—*Med. Rec.*

A JUDGE'S OPINION ON THE USE OF THE TITLE HOMŒOPATHIST.—Judge George C. Barrett, of the Supreme Court of this city, sends to the *New York Medical Times*, an opinion which will be read with much interest. He was asked to give a reply to the question: "Has a physician designating himself an 'Homœpathist and called as such to a patient, any legal or moral right to adopt other than homœepathic means in the treatment of the case?" To this Judge Barrett answers: "I have your note of the 11th inst., asking my opinion upon a question of professional ethics. In may judgment there can be but one answer to your question, and that is in the negative. If I call in a medical man who designates himself a 'homœopathic physician,' it is because I do not wish to be treated allopathically, or eclectically, or otherwise than homœopathically. There is an implied understanding between myself and the homœopathist that I shall receive the treatment which, by tradition and a general consensus of opinion, means small doses of a single drug administered upon the principle of *similia similibus curantur*. If there is to be any variation from that method I have a right to be informed of it and to be given an opportunity to decide. Common honesty demands that before a confiding patient is to be drugged with quinine, iron, morphine, or other medicaments, either singly or in combination, he should be told that the 'homœopathist' has failed and that relief can only be afforded by a change of system. An honest 'homœopath,' who has not succeeded, after doing his best with the appropriate homœpathic remedies administered on homœopathic principles, should undoubtedly try anything else which he believes may save or relieve his patient. But when he reaches that point the duty of taking the patient into his confidence becomes imperative. The patient may refuse to submit to the other system or he may agree, but prefers a physician whose life has been specially devoted to practice under that other system. He may say to the 'homœopathist;' You have failed, but I prefer to try anather gentleman of your own school, before resorting to a system that I have long since turned my back upon. Or he may say, Well, if homœopathy cannot save me I prefer to go to headquarters for allopathic treatment. All this, gentlemen, is the logical sequence of the particular designation 'Homœpathist.'"

RIB RESECTION.—The *Centrallbatt fur Chirurgie*, No. 7, 1889, contains the report of a case in which Dr. Grünbaum, of Warsaw, removed with success

the whole of the tenth rib on the right side, together with the corresponding transverse and articular processes of the tenth dorsal vertebra, for necrosis. The patient, a young man, aged 23, when first seen by Dr. Grünbaum, presented an open sore, about two inches in length, over the tenth rib in the axillary line on the right side. This sore was lined by unhealthy granulations, and at the bottom of it was exposed bare bone. Pressure along the posterior part of the rib and over the spinous process of the tenth dorsal vertebra caused much pain. The patient having been put under the influence of an anæsthetic, the rib was exposed by incision of the soft parts as far as the angle. The posterior part of this incision laid open a cavity, of the size of an apple, which contained thin, ill-smelling pus, and surrounded the head and neck of the rib and the transverse process of the tenth dorsal vertebra. The head and neck of the diseased rib having been carefully dissected away from the adherent pleura, the whole of the bone, together with adherent vertebral process, was removed without any wounding of this membrane. A cavity was now discovered in the body of the tenth dorsal vertebra, which was occupied partly by yellow tuberculous material, partly by vascular granulations. The contents of this cavity and also the granulations on the inner surface of the abcess cavity, together with shreds of tissue and purulent clots, were then removed with a sharp spoon. Although the wound healed favorably and with but little discharge of thin fluid, the patient remained feverish for a long time after the operation, but he ultimately made a complete recovery. This case, Dr. Grünbaum states, was certainly one of an acute form of osteomyelitis granulosa with suppuration, and caries of a part of the tenth dorsal vertebra, and of the whole of the tenth rib on the right side.—*London Med. Recorder.*

GENEROUS GIFT TO THE EPISCOPAL HOSPITAL OF PHILADELPHIA.—The family of the late George L. Harrison, of Philadelphia, has offered $200,000 to the board of trustees of the Protestant Episcopal Hospital, to found and to endow a building for incurables in connection with that institution. Some years ago Bishop Stevens submitted to the Convention of the Diocese suggestions in reference to such an addition to the hospital. He wanted an endowment for a ward of such a character. The trustees of the hospital took the matter in hand, and some measures were adopted which brought a response, and a nucleus was formed by donations until the total, some of it given for building and some for an endowment, amounted to something less than $10,000. Now, Mrs. Harrison has joined with the four sons of her late husband, Charles C., William W., Alfred C., and Mitchell Harrison, in making the gift to perpetuate the memory of George L. Harrison, one of the best and most generous friends the hospital ever had. It is almost unnecessary to add that the board of trustees has accepted the offer. It is seldom that money is given so generously and so wisely as in the present instance; for instead of expending the whole sum in a building, one-half of the amount is to be reserved as an endowment, so that the building when erected will have ready to its hand the money necessary for accomplishing the good work for which it is intended.

HYPERIDROSIS AMONG SOLDIERS.—An official circular, addressed to Prussian army surgeons respecting excessive sweating of the feet and other parts among the soldiers as an affection demanding treatment, advises the use of chromic acid as an efficient and economical application; of the strength of one part in ten of water. In cases of hyperidrosis of the feet such a ten-per-cent. solution, applied at intervals of three, four, or six weeks, has proved sufficiently strong to remedy this sort of disability. From the point of view of military hygiene, the prophylaxis of this affection is not merely a question of discomfort and inconvenience, but has its relations to the efficiency of the service, since all soldiers having hyperidrosis will be more or less prone to recurrent catarrhal troubles and to the evils attendant thereon. Hyperidrosis of the feet, moreover, will impair the marching capabilities of the men having that infirmity.

BALDNESS AND DANDRUFF.—A solution of chloral hydrate, five grains to the ounce of water, will clear the hair of dandruff, and prevent its falling out from that cause. In many instances where the patient is nearly bald, the application of the above-mentioned solution will restore the hair. Arnica oil is also an admirable remedy to promote the growth of hair. A small quantity well rubbed into the scalp three or four times a week can be tried with expectations of benefit.

THE PEANUT IN THERAPEUTICS.—The peanut, beloved of the gods—of the gallery, may possibly vindicate its claims to popularity, as it is recommended as a remedy for insomnia. It is said to be quite efficacious when taken *ad lib.*, freshly roasted before retiring. It is true the recommendation is made by a clergyman, but as it is not a new tonic made from bad whiskey, an opium cure containing morphine, or any of the other blessings to humanity usually floated on clergymen's endorsements, we need not condemn the peanut without a trial. It is certain that the free use of this nut sometimes produces vertigo and slight mental exhilaration.—*Philadelphia Medical Times.*

THE Homœopaths are to hold a Congress in Paris this year.

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CREMATION.

The disposal of the bodies of the dead in large centres of population, is a matter of no small importance to the living. Cremation, although admittedly the most desirable method, is not making the advance which sanitation demands. Among intelligent and cultivated people, who are above superstition, we might expect a more rapid growth of so important a reform; but sentiment and custom combined, are proverbially tenacious of life. It must be evident to all, that the accumulation of bodies of the dead in contracted spaces in or near towns and cities are sources of contamination, not only to the water-supply, but also to the atmosphere, and clearly deleterious to the health of the inhabitants of the vicinity.

In the profession, sanitary science is rapidly advancing in relative importance, and much has been accomplished thereby, in reducing the rate of mortality in towns and cities. Yet this pregnant source of disease and deaths, largely obtains, notwithstanding the efforts heretofore made to abate it. and the condition of many cemetries, not only the older cities of Europe, but also the more odern cities of America, is not much to the edit of our boasted civilization, not to speak of anitary evils arising therefrom. The accumula- n of the remains of human beings in all stages decay and corruption, in the cemetries of our r growing towns and cities, it is evident, must oo rapid for natures method of purification, and these vast putrifying and gas-generating masses cannot fail to become centres of disease and death, and largely add to the mortality of their respective localities.

That general cremation would obviate all this, and wholly eradicate this pestilent insanitary evil is self-evident. Many of the nations of the world in former ages burned the bodies of their dead, in fact, most of the Indo-Europeans retained this custom until Christianity began to spread among them. Cremation was opposed by the Christians chiefly on account of their belief in the resurrection of the body. But why the bodies of the dead should be less liable to resurrection after cremation, than after the slower, but not less certain reduction to their original elements, by nature's process, does not appear. However, many of the more modern, and not less intelligent Christians, do not raise that objection, and custom, with unreasoning sentiment are the chief, if not the only obstructions to the rapid growth of cremation. Were the demand for cremation common, the cost would not exceed that of ordinary burial in any case and indeed might be much less, so that in an economical sense, there could be no objections. The only valid objection which we have noticed is the destruction of the evidences of crime, where suspicion of criminality subsequently transpired. In Europe cremation is more frequently adopted than in America. In Italy it has been legal since 1877. In several other places it is occasionally adopted, and considerable agitation in its favor has occurred in Berlin, Dresden, Leipzig and other places. In Paris, last February, the body of a son of Dr. Jacoby, was cremated in the presence of officials and is said to be the first which was incinerated in that city. Much interest has been awakened during the last ten or fifteen years, in Holland, Belgium, France, England, and the United States. Yet the advance of this method of disposing of the dead has been slow, nor can it be said to have obtained the recognition and attention which, as a desirable sanitary measure, it merits.

Were the intelligent lay press to take the matter in hand, and bring it before the people, showing not only its utility, but its necessity, in the interests of the urban inhabitants of the world, something more in this direction would undoubtedly be accomplished, by which the sanitation of many towns and cities would be greatly improved.

OUR ICE SUPPLY.

In our last issue we referred to the very unsatisfactory state of affairs as regards our ice supply. In this matter we do not wish to limit our observations to Toronto, but would include, in the general principles involved, the great majority of cities and towns on this continent, where dependence is placed on a supply of natural ice. We are glad to learn from the city press that the medical men are aiding the Board of Health in Montreal to prohibit the introduction of impure ice into that city. Here, in Toronto, the Board of Health apparently is cognizant of the fact that much impure ice is being supplied to the citizens, not only from Ashbridge's Bay, but from outlying ponds, and the Medical Health officer has been, nominally at least, placed in a position to see that none but pure ice is supplied for food purposes. But, as we understand it, the law has been, so far, practically a dead letter, and indeed without some unheard of revolution of nature, and of the state of affairs in the body politic generally, it must always remain so.

Because we live in a climate where ice of a certain quality may be had for the harvesting, it appears visionary to unthinking minds that we shall be forced, by the onward march of science, to manufacture our ice, an article so necessary both for our health and comfort in this climate. It would appear that, according to law, ice for *cooling purposes* only may be taken from any portion of say Toronto Bay, polluted in a manner it is not necessary to describe. Now, we maintain that inasmuch as certain pathogenic organisms, the germs of typhoid, for example, are not rendered innocuous by freezing, that the sound principles of sanitation are violated by allowing such ice to be used in our midst for any purpose whatsoever.

We are supposed to have pure ice, that is, ice cut outside the 500 yards' limit in Toronto Bay, (where it is supposed to stand the test of purity), or from outlying places, such as Lake Simcoe, supplied at our doors for purposes of food. What are the facts of the case in the present season? We have figures and authority to show that, so far as the outlying places are concerned, not one-twentieth of the ice necessary for the food supply of Toronto was brought from Lake Simcoe. Regarding the amount cut in our own bay, it was practically impossible to get the remaining nineteen-twentieths necessary, owing to the thinness of the ice beyond the point named by law, during all but a very short time, and the whole bulk of the ice was taken within the 500 yards' limit, and near the foot of Simcoe street, and quite close in shore.

The obvious conclusion to be drawn from a sensible consideration of the matter is that we shall be driven to adopt artificial means to secure at least a sufficient supply of ice for food. Now, if it can be shown that an ice, absolutely pure and durable, can be produced at a cost, triflingly, if at all, in advance of the usual rates quoted for our natural impure ice, then we hold that, in all common sense, steps should be taken to bring about this most desirable state of affairs.

We may yet be visited by an ice famine, and then we shall be wholly dependent upon an outside source of supply. Now we have it on authority that manufactured ice can be delivered to the citizens of Toronto at a fractional increase of cost on to-day's quotation.

When we say manufactured ice we mean *pure ice*, and, after all, purity is the great desideratum in the matter of food. We have abundant proof from the superintendents of hospitals and health officers of European cities that the manufactured ice is perfectly pure, and is consequently so desirable for patients that it is in constant use. It is indeed a matter patent to the most simple mind that an ice manufactured by, say the De La Vergne Ammonia system must be pure. By this system the water is converted into steam. This is cooled by being passed through a number of pipes, and, after cooling, it is put through an animal filter, which completely doedorizes it. This final process leaves the water perfectly pure. It is then run into cans, which are placed in a solution of salt and water, when, by the ammonia process, the temperature is reduced to any degree desired. Ice made in this way is as transparent as a pane of glass and is absolutely pure.

ONTARIO MEDICAL ASSOCIATION.

We beg to call the attention of our readers the advertisement on another page of this issu regarding the Ontario Medical Association whic is to meet as usual in Toronto on Wednesday ai Thursday, the 5th and 6th of June. The numb

of papers promised is large, including some by eminent men in the United States. In addition to the list given in our last issue the Secretary, Dr. Wishart, has received a number of others among wnich are the following:

Dr. Halford Walker, Toronto, "Some practical points in gynæcology and abdominal surgery;" Dr. Price Brown, Toronto, "The treatment of phthisis pulmonalis;" Dr. Letcher, Henderson, Ky., "Penetrating gunshot wound of the abdomen;" Dr. Anglin, Kingston, "Cases of typhoid fever with perforation of the bowel;" Dr. Groves, Fergus, "A case of vaginal hysterectomy with abdominal ovariotomy;" Dr. McKinnon, Guelph, 'Auto-elimination of an abdominal tumour through an exploratory incision;" Dr. Neil McPhatter, Guelph, "Cholecystotomy;" Dr. Vanderveer, Albany, N. Y., "Appendicitis, perforative appendicitis, and peri-appendicitis;" Dr. J. G. White, Toronto, "On recent modes of treating fractures above the wrist joint;" Dr. Angus McKinnon, Alvinston, "Alcoholic stimulants as regards quality;" Dr. E. E. King, Toronto, will demonstrate the use of the cystoscope in diagnosing obscure abdominal disease; Dr. J. Campbell, Seaforth, "Reports of cases, surgical and medical; Dr. H. Hunt, Toronto, "Cases of laryngeal diphtheria;" Dr. Powell, Ottawa, "On two cases of perityphlitis with abscess; recovery in both, but by different methods; Dr. W. Gunn, Clinton, "A case of schleroderma, and exhibition of the patient."

It is to be hoped that the attendance may this year, as it has for the past four or five years, continue to increase. Doubtless a pleasant and profitable time will be spent by all who put in an appearance.

MEDICAL EXAMINATIONS.

Owing to the want of space in our last issue the following were crowded out:

ROYAL MEDICAL COLLEGE KINGSTON.

Gold Medal.—Fred Harkness; *Silver Medal.*—thur Elliott.

House Surgeons.—1, Augustine Gaudier; 2, nes McKenty.

irst Year Medal, Silver.—Isaac Woods.

.D.—John A. Belch; Hiram M. Buchanan; ix Cloutier; R. C. Chanonhouse, B.A.; Wm. avid; Peter Drummond; John Duff; Arthur C. Elliott; Geo. F. Emery; Anthony Freeland; Sidney H. Gardiner, B.A.; Norman R. Grant, B. A.; Hedley C. W. Graham; F. B. Harkness; Wm. H. Harvey; Adam E. Kilker; Joseph Holdcroft; Wm. H. Johnson; Omer L. Kilborne, B.A.; Henry O. Lanfear; Wm. C. Little; Alex. C. Mavety; Isabel McConville; Michael E. McGrath; Jas. Y. McKilloy; Harold S. Northmore; Jas. A. Patterson; Wm. H. Rankin; Andrew Robinson; Ernest Sands; Elias T. Snider; Alex. Stewart; Harry E. Tillman; Stanley I. Warner.

WESTERN UNIVERSITY, LONDON.

Gold Medal.—C. A. Cline; *Silver Medal.*—R. H. Honnor.

Third Year Scholarship.—A. Hayes; *First Year Scholarship.*—M. Gowan.

M.D.—Messrs Cooper, McRitchie, Hotson, Fraser, Bayley.

UNIVERSITY OF BISHOP'S COLLEGE.

Primary.—H. Talby, C. R. Woods, H. G. Spooner.

M.D.—Chas. E. Elliott, James M. Jack, W. B. Towle, Thos. S. Nichol, and Dr. Alfred C. Smith, New Brunswick, received the *ad eundem* degree of C.M., M.D.

WOMEN'S MEDICAL COLLEGE TORONTO.

FINAL PRIZE, Dr. J. S. Carson; *Primary Prize*, Miss M. A. Gifford.

PRIMARY, Miss Gifford, Miss Graham, Miss Mead.

MANITOBA MEDICAL COLLEGE.

THE $100 Scholarship, D. J. G. Calder; *Primary Scholarship*, 1st, G. Bell; 2nd, M. S. Fraser.

PRIMARY, M. S. Fraser, G. Bell, H. P. Byers, E. A. Braithwaite, J. W. Cartmell, J. H. Sparling, F. F. Westbrook, J. Ferguson.

M.D., C.M., J. G. Calder, T. J. Lamont, R. J. Lipsett, E. A. Blakely, A. B. Stewart.

SIX IMPORTANT FACTS ABOUT ENTERIC FEVER.—Dr. Reed, in *San. News*, gives the following as the pith of what is known regarding the spread of enteric fever:—1. Typhoid fever is caused by the introduction of a specific germ into the alimentary canal. 2. This specific germ multiplies in the alimentary canal, and in turn is thrown off in the stools of the patient. 3. Its vitality is much greater than at first supposed, resisting a variation of temperature ranging from even below the freezing point to 133° F. 4. The germ may be communicated from one person to another by water, milk, foods and air. 5. To prevent its spread, all the dejecta should either be burned at

once (which is preferable), or thoroughly disinfected, by throwing them into a pot of boiling water and thoroughly cooking them, or using some effective germicide, such as a strong solution of the bichloride of mercury, in sufficient quantities to insure their destruction before they are buried, which should be at a sufficient distance from any neighboring water supplies to insure their freedom from contamination. 6. If the water supply is of a suspicious character, thoroughly boil it before using, and then place it where there is no possibility of its becoming infected. If ice is used, pack it around the water vessel, not allowing the melted ice in any way to enter your drinking water. By the strict observance and practical application of these few simple hints, I am certain you will soon be led to believe that typhoid fever is a preventable disease.

CONTAGIOUSNESS OF PNEUMONIA.—Netler, *Arch. Gén. de Méd. Boston Med. and Surg. Jour.*, has a long article reviewing the epidemics of pneumonia which have been recorded, and adds a few other instances which have come within his own experience. His most important conclusions are as follows:—

1. Pneumonia is a contagious disease of parasitic origin, and is transmissible either directly or by the intervention of a third person, or by inanimate objects, such as wearing apparel, etc. 2. The pneumococci are not destroyed by desiccation, and are diffusible through the air, but not to great distances, at most the interval between three hospital beds. They maintain their virulence for a period which has not yet been definitely determined, but probably never more than three years 3. Contagion is possible during the entire course of the disease and even after recovery. 4. The period of incubation averages from five to seven days, but may vary between one and twenty. 5. Patients who have passed through a pneumonia are dangerous both to themselves and their neighbors as living micrococci may be found in their saliva many years after. Thence in part the epidemic appearance of the disease in certain families during long periods, and also its frequent recurrence in certain individuals who have once survived it. 6. Rigid quarantine of the patients seems unnecessary, but other patients and healthy persons should not be brought into too intimate relations with them. The sick-room must be kept well ventilated and clean, the sputum disinfected, and the cocci lurking in the mouth destroyed so far as possible.

AN ACTIVE AND VERY USEFUL EMETIC.—A gentleman writing to the *Br. Med. Jour.* says on the subject of emetics:—Several of your correspondents have lately written on the use of apomorphine as an emetic administered hypodermically in intoxication. I cannot see why such a doubtful remedy should be used when we have others more simple and effective. Years ago, when in charge of a surveying party on French Creek, near the Alleghany Mountains, the drunken doctor of the village where we stayed the night, when in a state of semi-drunkenness, took a piece of carb. ammoniæ out of his surgery bottle and chewed it. The effect was almost magical. The contents of the stomach were quickly ejected, the usual depression not following, so that he was able to at once resume his debauch. Since then I have tried the remedy many times with great success. The drunkard can generally be roused and got to swal low half a drachm of ammon. carb. dissolved in a wineglass of water and if drunk off this will prove immediately effective as an emetic and restorer. The reason is obvious. The stomach is cleared and the stimulating effect of the salt prevents the excessive depression usually following excess. Never having seen nor heard of this treatment being adopted in this country is my excuse for troubling you with this letter.

ANOTHER TEST OF LIVE-BIRTH IN INFANTS.—Dr. Nitkin, of Moscow, lately read a paper on this subject, giving his experience of the test, *Am. Jour. Med. Sciences*, as derived from *post-mortem* examinations of one hundred and twenty-four new-born children in Moscow. His conclusions are as follows:—(1) The gastro-intestinal test not only supports the lung test, but it is even able in some cases, in which the lung test is negative, to afford evidence by itself of live-birth. (2) If in the fresh corpse of a new-born child, the stomach, and especially if also the intestines contain air, and float in water, it may with certainty be concluded that the child survived birth; provided air was not artificially introduced into the stomach, as by inflation. (3) If the body is well advanced in putrefaction, the gastro-intestinal test is less reliable

than the lung test; but if the body is only moderately putrefied, the former test is as trustworthy as the latter. (4) A negative result from the gastro-intestinal test is not proof of the child having been stillborn, no more than is a negative result from the lung test; but if such a result is obtained from the application of *both* tests in fresh, but especially in putrid bodies, then it may be inferred that the child was stillborn, unless in rare cases in which signs exist of sudden death by violence applied immediately after birth. (5) If the stomach and a portion of the intestines are well filled with air and the corpse is fresh, it may certainly be concluded that the child did not die immediately after birth—excepting always cases of artificial inflation. (6) The first bubbles of air reach the new-born child's stomach by swallowing. (7) The possibility of "atelectasis secundaria neonatorum"—that is, of the complete disappearance of air from the lungs of a new-born child—is highly probable.

ANTIPYRIN IN SCIATICA.—The *Brit. Med. Jour.* gives an interesting account of a patient speedily cured by this remedy. "The patient had been confined to his bed for two months, and was unable to move his left leg. The hip-joint was so painful that the gentlest examination with the fingers could scarcely be borne. The slightest pressure over the gluteal, sciatic, and trochanteric regions made the patient cry out with pain. Sleep had been impossible for some nights. Injections of morphine, anodyne applications, salicylate of soda, iodide of potassium, sulphate of quinine, tincture of gelsemium, bromide of potassium were all tried, without the least effect. Tonic treatment with iodide of iron, cod-liver oil, etc., proved equally futile. Antipyrin was given in doses of seven grains with an equal quantity of quinine three times a day. The day after this treatment was begun the patient wished to get up and could move the affected limb quite freely. Ten days afterward he left the hospital, completely cured and having gained considerably in weight."

HERNIA OF THE PREGNANT UTERUS.—Dr. S. S. Iams, Washington, (*Am. Jour. of Obst.*) has collected what he believes to be, all the reported cases of this accident. The following is his summary of them:

Varieties—Nine inguinal; one crural; four umbilical, and eight ventral. Mothers saved, fifteen; not stated, two; mothers lost, five; children saved, eighteen, (twins); children lost, three; not stated two. Cæsarean section was performed seven times; mothers saved, two; deaths, five, and seven children were saved. Porro's operation was performed once, the mother being saved, but the child was still born. Induction of premature labor once, both mother and child saved. In one case of ingunial hernia the labor was spontaneous. In the umbilical and the ventral varieties, the delivery was mostly natural, with support of the uterus, except one in which forceps were applied with a speedy termination of labor. All the mothers were saved but one child was killed by craniotomy, the reason for which is not given.

REMEDY FOR CROUP.—Dr. J. B. Johnson says, *Med. and Surg. Rep.*:—The following formula has been a standard prescription of mine for croup for many years. It relieves all the symptoms of the disease with greater promptness and certainty than any other mixture I have ever used. I give it in teaspoonful doses to infants six or eight months old; and to children six or eight years old I give dessertspoonful doses every ten or fifteen minutes, until free emesis is produced; I also use it at longer intervals until a cure is established. The formula is as follows:—

R.—Misturæ acaciæ, ...	f℥ij.
Balsam copaibæ, ...	f℥j.
Ext. ipecac. fl., ...	f℥j.
Potassii iodidi, ...	℥j.
Pulv. potassii chlorati, . .	℥j.—M.

SIG.—Shake well. Dose, a teaspoonful every ten or fifteen minutes until free vomiting ensues; and then continue the same dose, at intervals of a half-hour or hour, until the disease yields.

I have frequently relieved a croupy cough of twelve hours' duration, in three or four hours, by giving tablespoonful doses, every quarter or half-hour, of the following mixture:—

R.—Potassii iodidi, ...	℥j.
Pulv. potassii chlorati, . . .	℥j.
Aquæ destill., ...	f℥vj.—M.

SIG.—Shake well and give a tablespoonful every quarter or half-hour until relief is attained.

SULPHURET OF CALCIUM, LOCALLY IN DYPHTHERIA.—In the local treatment of dyptheria, Dr.

G. E. Hubbard, of New York, uses exclusively (*N. Y. Med. Reg.*) Ullminck's solution, sulphuret of calcium, and believes it to be the safest and most effective application for the destruction of the disease germs. He employs the clear solution by means of a spray, every half hour until the disease is under control. In cases of very young children he adds a little water to the solution, at first, until satisfied that it does not irritate the tender mucous membrane. Under this treatment the diphtheritic patches undergo a change in a few hours; in some cases they disappear entirely in a day. Even if the false membrane is extensively developed when the case is seen, the spray will be effective in arresting systemic poisoning, as the solution is taken into the patient's stomach. Solution is prepared as follows:—Take of lime, one part; sulphur, two parts; water, twenty parts. Slack the lime into some of the water, then add the remainder and the sulphur: boil to twelve parts and filter.

SALICYLIC ACID IN CHRONIC TUBERCULOUS JOINT DISEASE.—Dr. Robert W. Sorett, in an ineteresting article on the above in the *Bost. Med. and Surg. Jour.*, after citing a number of cases, gives the following as his conclusion in the matter:

That salicylic acid in large doses is useful as an aid to the mechanical treatment of chronic tuberculous joint disease, not in routine conditions, but—

(1) When night cries are present.

(2) When the diseased joint is very painful and sensitive to jar.

(3) When vomiting and general discomfort are associated with an increase in the local disease.

That relief from pain, and diminished sensitiveness follow at once, as quickly as in acute articular rheumatism, and that the drug should be given in as large doses as for that affection until the pain is relieved or the physiological effect is produced.

The writer calls attention to the fact that mechanical means were constantly used while the drug was exhibited, but that such mechanical means had failed to relieve the pains in connection with the disease.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—The authorities of the American Association for the Advancement of Science, have chosen Toronto as their next place of meeting, and that important body will accordingly convene in the capital of Ontario, on the 27th August next, to remain in session one week. This gathering of probably a thousand prominent scientific men, will prove an interesting event for all who desire the diffusion of systematized knowledge, and its outcome cannot fail to be of benefit to the whole province. The discussion of scientific subjects, the interchange of experience, and the application of its results, must stimulate the material as well as the intellectual progress of the country.

CANADIAN MEDICAL ASSOCIATION.—The Grand Trunk Railway has extended to the Association an offer of a reduced rate from all points on their line, equivalent to that given by the Canadian Pacific Railway, so that members may leave for Banff from the station nearest to them, on either line, at the same cost. This will also enable members from Central Ontario, who wish to do so, to join the Canadian Pacific Railway at North Bay.

JAMES BELL, M.D., *Sec'y.*

DIARRHŒA OF PHTHISIS.—Dr. Debove, *Bost. Med. and Surg. Jour.* claims to have had much success in the treatment of chronic diarrhœa, especially of the tuberculous form, by silicate of magnesium. This remedy he administers in doses of half an ounce to an ounce and a half a day, suspended in a quart of milk. As a result the diarrhœa disappears. The silicate of magnesium is known under the name of *talc* or *steatite*; it is insoluble, inert, and has not heretofore been supposed to have any medicinal properties whatever. According to Debove, it promotes the healing of intestinal ulcerations, but seems only to be efficacious by its presence in large quantities. Debove says it is readily and rapidly eliminated from the intestines.

CEREBRAL HÆMORRHAGE.—Dr. A. Smith, (*N. Y. Med. Rec.*) says that ergot is of value only in hæmorrhage from the arterioles and capillaries, and is contra-indicated in cerebral hæmorrhage, owing to its increasing vasaular tension. Pressure is the only means of stopping the bleeding and should be applied from within the vessels. Therefore he suggests that the head be placed lower than the body, and that arnyl nitrite be administered to increase cerebral congestion and diminish *vis-a-tergo* by lowering the vascular tension. The

immediate effect of this would be to bring on symptoms of pressure, but in a short time the blood would have coagulated in the vessels, when the head could be raised and the amyl withheld. Symptoms of coma would thus be passing off when by the opposite method they would be deepening.

DIAGNOSIS OF DUODENAL ULCER.—The points upon which Bucquoy (*Arch. Gen*) lays the greatest stress in the diagnosis of duodenal ulcer, are (1) Sudden intestinal hæmorrhage in an apparently healthy person, which tends to recur and produce a profound anæmia; hæmatemesis may precede or accompany the melæna. (2) Pain in the right hypochondriac region coming on late (two or three hours after eating.) This is an uncertain symptom as the food may have no special influence in producing the pain. (3) A more important criterion is in the occurrence of gastric crises, agonising attacks of colic; the hæmorrhage being more apt to occur about the time of these attacks. Absolute immunity from all gastic distress in the interval between taking food is more common in duodenal than in gastric ulcer. (4). The occurrence of melæna without hæmatemesis is the chief point in the diagnosis of duodenal ulcer. Bucquoy and Johnston both hold that it can be diagnosed by this symptom alone.

ITCHING OF JAUNDICE.—Dr. Goodhart (*Br. Med. Jour.*) has used pilocarpine successfully in relieving the itching of jaundice in six cases, with not a single failure. One patient had one-third of a grain injected many times, and always with this result, that during the first twenty-four hours he was quite free; the second he was fairly free and the third he was considerably troubled again, and the dose had to be repeated. When we consider that there is really nothing that can be relied upon to relieve this distressing symptom of jaundice, Dr. Goodhart's plan may prove of service.

THE SALICYLATE OF MERCURY.—In a communication to the Polyclinic Society of Rio de Janiero, Dr. Aranjo has given the following as the advantages (*Le Prog. Méd.*) of the above salt of Mercury: 1. That it is readily borne; it does not give rise to gastralgia, enteralgia, or diarrhœa, which frequently follow from other mercurials, not even excepting the protoidide and the tannate. 2. It never produces mercurial stomatitis. 3. Its action is more energetic than that of any other mercurial salt now in use. He recommends a dose of $\frac{1}{3}$ gr. in pill form, three times a day. This remedy has been tried in numerous cases of syphilis, since the above communication was made with perfect success.

PURPERAL ECLAMPSIA AND PURPERAL CONVULSIONS.—Dr. Davis of Bridgeton, N. J., states, (*Cin. Lancet Clinic*), that he has promptly relieved dangerous attacks of these diseases by the hyperdermic use of morphia and veratrum viride. Morphia was given in $\frac{1}{4}$ to $\frac{1}{3}$-grain doses, followed in fifteen minutes by 5 drops of Norwood's tincture of veratrum viride. These were repeated as needed, the pulse being the guide. The stertorous breathing ceased, the rigidity of the muscles relaxed, the pulse dropped from 140 to 80 in less than two hours, the patient slept several hours and awoke in good condition. One of the cases of eclampsia was delivered the next day, the other in ten days without recurrence of attack.

ONTARIO MEDICAL COUNCIL EXAMINATIONS.—We regret that want of space prevents our giving the list of successful candidates at the late examinations, held by the Ontario Medical Council. Of the primary candidates only 45% satisfied the examiners. In the final 65% passed. Mr. J. Sutherland, of Muncey, Ont., was the only one out of a total of 355 candidates who succeeded in taking honors.

A GOOD law regarding the duties of druggists obtains in Indiana where a prescription containing more than $\frac{1}{4}$ opium or gr. 1-20 of morphia. cannot be refilled more than once without the written or verbal instructions of the prescriber.

APPOINTMENT.—Dr. Ed. M. Spencer, L.R.C.P. & S., Ed., has been appointed medical officer of the Buckland District of Tavistock Union, Devonshire, England.

REMOVAL.—Dr. A. H. Edminson has removed from Harwood to Keewatin, Ont. We wish the Dr. success in his change of location.

BRITISH DIPLOMAS.—Drs. G. A. Féré, and J. Guinane, received the L.R.C.P. (London) diploma at the recent examination.

WE were very sorry to hear of the serious accident which happened to Dr. T. R. Buckham recently, by being thrown from his buggy. We are glad, however, to state that he is rapidly recovering, and we trust that he will soon be able to be about again.

Books and Pamphlets.

THE INSANE IN FOREIGN COUNTRIES, by William P. Letchworth, President of the New York State Board of Charities. New York and London: G. P. Putnam's Sons (The Knickerbocker Press); Toronto: Williamson & Co., 5 King W.

This carefully prepared and nicely bound work is an historical *résume* of the methods adopted for the treatment of the insane in olden-times, and a comparison of the methods employed to-day in asylums and institutions where this unfortunate class are cared for and treated. It is an able and exceedingly interesting treatise showing what astounding barbarity those who professed to a careful study of insanity could employ in its treatment. This work is instructive in that it shows the forms of treatment adopted to-day in the main institutions in England and the United States. It is a treatise which any practitioner can read with great profit and interest, and is very strongly in favor of those methods of treatment now generally adopted, where restraint is the exceptional and rare feature in the management of the insane.

MATERIA MEDICA AND THERAPEUTICS, by John B. Biddle, M.D., late Professor of Materia Medica and Therapeutics in the Jefferson Medical College, Philadelphia Eleventh edition, revised and enlarged, with special reference to Therapeutics, and to the Physiological action of Medicine, by Clement Biddle, M.D., and Henry Morris, M.D., Demonstrator of Obstetrics and Gynæcology, Jefferson Medical College, etc. Illustrated. Philadelphia: P. Blakiston, Son & Co. Toronto: Carveth & Co. 1889.

The eleventh edition of this work was rendered necessary by the exhaustion of the tenth. Some (21) new cuts have been introduced. An understanding of the physiological action of medicines is now looked upon as a *sine qua non* in rational therapeutics. In this edition the revisers, fully alive to this fact, have laid more stress upon this part of the subject, and especially as to numerous new drugs which have lately come into general use, such as urethran, papaya, strophanthus, saccharin, sparteine, etc. Much obsolete and useless matter has been cut out, and altogether the work as it now stands is up to the standard of modern science, and as such we can recommend it to students and others desirous of gaining a full knowledge of the difficult but important subjects Materia Medica, and Therapeutics.

CAZEAUX AND TARNIER'S THEORY AND PRACTICE OF OBSTETRICS. Eighth American Edition. Edited and Revised by Robert J. Hess, M.D., with an appendix by Paul F. Mundé, M.D., with chromo-lithographs and one hundred and seventy-five wood engravings. Student's Edition. Price, $5. Philadelphia: P. Blakiston, Son & Co. 1889. Toronto: Vannevar & Co.

The work of Cazeaux and Tarnier has been always considered a classic. The present enlarged edition (over 1,200 pages) is still an advance on former ones. The discussion of its merits would be superfluous. Its name as a work complete and systematic, is so well known, and its popularity has been so pronounced, that wherever the language of obstetrics is heard, the names Cazeaux and Tarnier are as household words. We can most heartily recommend it as a standard book of reference, being assured it will prove of inestimable value to all who peruse it.

ESSENTIALS OF PHYSICS AND CHEMISTRY, written especially for the use of students in medicines by Condict W. Cutter, M. S., M. D., Physician-in-Chief of the New York Dispensary, etc. Third Edition. Enlarged and revised. New York & London: G. P. Putnams, Sons. Toronto: Williamson & Co.. 5 King W.

In this little work the essentials of physics and chemistry are placed in such a form as to meet the requirements of the medical student who is preparing these subjects for examination. The points are clearly put, and if a student has carefully followed a larger treatise or an able course of lectures upon these subjects he will find this work a valuable aid.

WARNER'S THERAPEUTIC REFERENCE BOOK. Philadelphia: Wm. R. Warner & Co., 1889. $1.

Contains much useful information in a small space.

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Original Communications.

THE PRESIDENTIAL ADDRESS TO THE ONTARIO MEDICAL ASSOCIATION.

BY DR. W. HENDERSON, KINGSTON, ONT.

Delivered June 5th, 1889.

GENTLEMEN,—When little less than a year ago I was chosen President of this Association, while attempting to express my appreciation of the distinguished place to which you had elevated me, I said that I felt no little diffidence in accepting such a responsible position. I have since experienced, what time has only served to impress more fully upon me, the responsibilities of this high office, and has rendered greater my gratitude for the support and confidence reposed in me by this Association.

The honor which you have conferred on me may well be sought by any member of our profession, and I am deeply sensible of the fact that no exclusive personal merit of my own could command a place so much beyond my most sanguine expectations, hence, I feel that my selection was suggested chiefly because it was the desire of this Association that a member from Eastern Ontario should occupy the Presidential chair.

I also take it as a sign of encouragement to the younger medical men of this Province, when one is chosen from their ranks to fill an office which has hitherto been so ably occupied by men who are justly looked upon as leaders of our profession, both on account of their long experience and valuable contributions to medical science. I wish, therefore, to offer you my most heartfelt thanks for the honor you have bestowed upon me. At the same time, I would bespeak your kind indulgence, and although I cannot hope to fulfil my duties as well as any of my predecessors in office, I can assure you that it has been my endeavor to emulate their zeal for your welfare, by always using my best exertions to promote the interests of this Association.

In welcoming you to our ninth annual meeting, I am pleased to note that the interest taken in this Association ever since its establishment has not abated, and the large attendance here to-day may surely be taken as an index of its popularity among the profession in Ontario. The arrangements made for this meeting are, as you will learn from the programme, complete in every respect, and I trust that in the discussions on the different topics, every member present will feel at perfect liberty to engage. It affords me no small degree of pleasure to join with you in extending a cordial welcome to several distinguished members of the profession from the neighboring Republic. These visitors are welcome as members of a brotherhood in practical pursuit of one grand object, and knowing no distinction of country, race, or creed. Our American friends have long since learned the value of such organizations as this, and in their county, state and national associations they have done much to advance the interests of the medical profession in the United States.

The brilliant men who have been honored members of the American medical profession have all been active in promoting the success of medical organizations for the discussion of scientific subjects, and have done much towards elevating the profession by such gatherings, to a higher plane of usefulness and honor.

We also gladly greet our *confrères* from the sister Province who are here to-day, not only because they come as representatives of a great university faculty, but also for the reason that we know them to be men of high professional standing and attainments.

During the past year several who have been active members of our profession have been called from labor to rest, and of many of these departed brethren it may be said, "Their good works do follow them." Some received the summons while in the prime of life, and while actively engaged in their chosen work. To enumerate at length their names and virtues is not necessary, but one has fallen from our ranks whose distinguished talents and successful career entitle him to special mention, and who will long be remembered. I refer to Dr. R. P. Howard, late Dean of McGill College,

whose death, a short time ago, caused feelings of general regret among medical men throughout the whole Dominion. By his numerous valuable contributions to medical literature, Dr. Howard was known to many who never came in contact with the man, nor knew the affable manner of the great Montreal physician. Those of us who had the pleasure of meeting Dr. Howard at the meeting of the Canada Medical Association in Ottawa last autumn will long recollect his geniality on that occasion. The interesting paper he then presented, on "Opthalmoplegia Externa," was his last contribution to the programme of a Canadian Medical Association.

The subject of an address on an occasion like the present, has given me no small amount of anxiety, and in my perplexity I consulted our by-laws, where it is laid down, "That the President is required to deliver an address setting forth the condition of the profession in this Province, with such suggestions as he may deem it proper to make; and secondly, that he may give a dissertatiom on some subject kindred to the objects of this Association." With the exception of a few introductory observations I will confine my remarks to the present condition and needs of scientific medicine in Ontario.

The diffusion of knowledge is now so rapid and widespread, that no sooner does a new discovery appear in a medical journal than it is seized upon by the daily press and carried from one end of the world to the other. Indeed, the general public appear to have become so familiar with the work of bacteriologists, that I am informed on good authority that when a Northwest cowboy wishes to use a term of derision that will make his companion feel infinitely small, he calls him a "microbe." However, this public interest in "things medical" is not of recent date, but, on the contrary, it has existed ever since the art of healing emerged from the realms of mythology. Herodotus tells us that so great an interest was taken in disease by the Chaldeans and Babylonians that, when a person was taken ill, the sick one was carried into the market-place, and no one was allowed to pass by him without inquiring into the nature of his illness. The passage reads as follows: "Then those who passed by the sick person conferred with him about the disease, to discover whether they themselves had ever been afflicted with the same, or had seen others so afflicted." Only those who had suffered were allowed to prescribe for the sick, and thus we see that in the early history of medicine the people were governed by the motto, "*Experientia docet.*" Ancient records teach us that the Grecians adopted a similar practice until the priests combined medicine with religion, and ascribed their powers to the god Æsculapius. The Grecian priests erected temples where they met, and not only treated the sick, but discoursed upon the medical topics of the day, and these temples of Æsculapius corresponded to our present hospitals and medical colleges. They subsequently established scholastic centres in various parts of the civilized world, and surrounded medical teaching with the same mystery and superstition that for so long a time enveloped the profession of theology. Gradually and mainly through the instrumentality of Hippocrates, medicine was placed upon a more rational and scientific basis, and he is justly considered one of the greatest benefactors of the human race.

I have made these few preliminary remarks in order to show that medicine, like law and religion, was instituted for the public benefit, and consequently the medical profession should have the public sympathy and support in everything that will aid it in carrying out its manifold duties. What, then, is the state of the medical profession in Ontario, to-day? and what are the needs of scientific medicine, in order that our professional duties may be more thoroughly performed?

I am of the opinion that at no time in the history of our country has the medical profession of Ontario been in a more favorable state, than at the present day, at no period of its existence has it been better organized, and consequently so well prepared for dealing with questions appertaining to our future work for the public welfare. We do not pretend to have accomplished work in the past that entitles the medical history of Canada to be brought into comparison with that of older countries, and indeed such could not be expect in a Dominion as young as ours. However, it the proud boast of our profession that medic knows neither country nor clime, which can alc claim to have produced all the illustrious medi men; hence we Canadians, in common with fellow-workers in every land, share alike the gl that illumines names such as Hippocrates, Gal

Harvey, Hunter, Jenner or Laennec. But we are answerable for the present state and standing of our profession, and without boasting I may say, that in Ontario to-day, we have as complete a system of medical education, and as strict an observance of medical ethics, as can be found anywhere else, and it is with the view of making these still more perfect, that I intend commenting upon them to-day.

Certainly a good educational system will not of itself guarantee first-class doctors, for time alone can bring us the large population that affords such ample material for clinical study existing in the hospitals of large European and American cities. Nevertheless efficient hospital accommodation may now be found in our larger cities and even smaller places, such as Brantford, Guelph, Stratford, Belleville and Brockville are possessed of well equipped institutions for the reception of the sick.

I would also venture to assert, that nowhere else is such a large amount of self-denying zeal shown by medical practitioners in order to properly prepare themselves for their duties towards their patients by keeping abreast with the latest advances and improved methods of treatment. Every spring witnesses a steady stream of young doctors, journeying eastward to England and the Continent, in order to enrich their store of medical knowledge by observing the methods adopted by the great master-minds in medicine. Another contingent wend their way towards the south, for the purpose of sharing the rich harvest awaiting them at the clinics in New York, and other large American cities. These young men have already spent four years in the pursuit of their medical studies and it redounds to their credit that they are willing to add another year or more to their collegiate life, before they begin actual practice in Ontario. Besides those mentioned, there is also another class, including older practitioners, who leave their homes in either town or country, and almost annually visit one of the great medical centres to efresh their memories, and to witness the actual echnique of new and improved operations.

All honor, I say, to such men who are willing to crifice so much time and money for the public al, and few other countries can produce an ial amount of self-enforced post-graduate educa- n. Such being the case this question may turally be asked: "Are the laws and regulations relating to medical men, so constructed that they will encourage the retention of the best medical talent in Ontario, and at the same time tend to keep away an inferior class of medical men?"

This, I take it, should be the main object of medical legislation, in the interest alike of the public and the medical profession. Such, I believe, was the motive which actuated the promoters of the Ontario Medical Council, an institution which has done much towards elevating the standard of medical education in the past, and which I hope will be productive of still greater good in the future. It is because I have the greatest possible respect for the members of that Council and think them desirous of acting in an impartial manner, that I venture to say, that the first object mentioned was not kept in view, when they enforced the rule excluding men who possess British diplomas from practising in Ontario, and furthermore that the latter has not been fully attained, as long as advertising medical men are allowed to roam throughout the country, and grow rich upon proceeds procured from the purses of a credulous portion of the unsuspecting public. These are two questions which are worthy of your consideration upon an important occasion like the present, when our members are gathered together from all parts of the Province for the discussion of mutual interest.

1st. With regard to the non-registration of British Diplomas, I claim that a mistake was made when this legislation was brought into force, regardless of the scientific standing and severity of the examinations conducted in the institution granting the medical or surgical diploma. While I admit that we were formerly lax in allowing the indiscriminate registration of licentiates of the Apothecaries' Society, and other inferior qualifications, it does seem a grievance that an M. D. from London University or a Fellow or Member of the College of Physicians or Surgeons in Great Britain should be required to undergo a further test of his ability, at a very considerable expense, before he shall be allowed to practise in Ontario. This is not the only reason why I take exception to the legislation in question, but also because I learn from conversation with medical students that it will tend to lessen the number of young doctors who will take post-graduate courses abroad. The fact that a British diploma exempted men

from passing the Ontario Medical Council was formerly an incentive to Canadian students to visit the hospitals of Great Britain, and it was of particular value to those who could not well afford to pay for both diplomas. Now that this stimulus has been taken away, I opine that as a result fewer of our young men will visit the English hospitals or try to obtain British degrees, and as a consequence the standing of the medical profession in Ontario may be ultimately impaired. Surely this law can be so modified that at least the Canadian graduate who possesses an M. D. from one of the Ontario Universities may be permitted to practise after passing an examination in Great Britain, equal in severity to that required by the Ontario Medical Council. To those who would place obstacles in the paths of our students and who try to prevent them from pursuing their post-graduate studies abroad, I would answer in the words of Medea to the Corinthians:

> "There are who distant from their native soil,
> Still for their own and country's glory toil,
> While some fast rooted to their parent-spot;
> In life are useless and in death forgot."

It is with sincere regret that I have to admit that our noble profession is disgraced by the action of certain medical men who carry on their practice with unblushing quackery. By means of startling advertisements in newspapers, and printed circular they promise to cure consumption, cancer, and other fatal diseases, when any such cure is impossible, while they assure another class of patients that they are seriously ill when really their ailments are of a trivial nature. By means of misrepresentation they bring discredit on our calling, although the real sufferers are the general public, who, if they survive the treatment given by these professional parasites, usually return to their former medical advisers with depleted purses and injured health. But the fault does not all lie with the medical charlatan who is often directly encouraged to practise in an irregular manner by the caprices and credulity of people who seem bound to exercise their own judgment by resorting to quackery and patent medicines. Thus it is no uncommon thing for doctors to be called upon to treat patients who have ruined their health and wasted their money in this exercise of their private judgment. Some of these quacks term themselves British Surgeons, others are called American Specialists, but all alike are only allowed to pursue their nefarious practice owing to the fact that they are registered in Ontario. Ours being a paternal form of government should protect the people by granting permission to the Ontario Medical Council to cancel the diploma of any persons acting in such an irregular manner. Then this question could be speedily disposed of by the Council, and while the public would be better protected, our profession would be freed from the few of whom we are ashamed and from whom we would be gladly separated. This part of the law, as at present constituted, tends to perplex and impoverish the unhappy medical student, and while the regular practitioner is taxed to support it, the supercilious and insolent imposter remains unmolested and left in the full and undisturbed exercise of his fraudulent and knavish tricks.

I would urge as one of the first means towards securing a more desirable scientific position for our profession, the establishment of a live medical society in every county of the Province of Ontario. No one will dispute the fact that such organizations would be a link binding the members of the profession more closely together and would do much towards causing the jealousies and intolerance of cliques to give place to liberality and good fellowship. I might even take a step further and urge that at the present meeting of this Association a committee be appointed to ascertain whether we cannot, during the coming year, have established in every county a medical society as a branch of this Provincial Association. Might we not take a leaf from the constitutions of the two great political parties, who, in every county, have an active organization working for the good of the cause they represent, and all acknowledging allegiance to a head or Provincial Association in whose wisdom, all are supposed to repose the sublimest confidence? Where county societies have been formed in Ontario, they have proven of advantage in developing a broader spirit among the members of the profession, who, by being thus brought t gether, become more tolerant, of the opinio of each other, and in the giving and receiving knowledge all become gainers and none can p sibly suffer loss.

Then again the tariff of fees and the pro charges for medical attendance of friendly societ can be better regulated through the agencies

local societies than by any other means, and our consultants should be drawn from among those who have acquired distinction in a truly professional sense.

I am glad to know that we have some active county societies now doing good work in this Province, and those I have had the opportunity of visiting during the past year have convinced me that in every county there should be similar organizations. In Eastern Ontario we have the Rideau and Bathurst, and Cataraqui Societies both of which are in a flourishing condition. In the West we have the County of Huron Society, to which I believe is due the credit of being the oldest county society in the Province, and I am pleased to know that its regular quarterly meetings are well attended and highly appreciated. In other counties, as well as in most of our cities, regular medical societies are maintained and it only requires a little individual effort on the part of the local members to have established and maintained in every county an active medical society as a branch of the Ontario Medical Association. In this connection we must not forget that one of our objects is to form a connecting link between the various city and county societies and the Canada Medical Association.

My predecessors in office have alluded to the friendly relations which should exist between this Association and [the parent body (The Canada Medical Association). I can only reiterate what they have said, and may add that I trust many members of the profession in this Province will attend the next meeting of the Dominion Association, to be held at Banff, on the 12th of August. The arrangements which have been made by the executive officers for this trip are very complete, and those who can, should avail themselves of the privilege of participating in what promises to be one of the most enjoyable events that has ever been decided upon for pleasure and information of Canadian medical men and their families.

The establishment of the Ontario Medical Library during the past year will, I trust, be appreciated by every medical man in Ontario, and I have pleasure in commending it to the beneficent support of the profession. The formation of a museum should also be taken into consideration as a counterpart to the medical library. As Mr. Jonathan Hutchinson has said, "They are twin institutions, having for their common aim the advance of knowledge. The library may be defined to be a collection of knowledge documents, in a literary form, for the most part printed; the museum a collection in concrete form of the materials out of which knowledge is built up and by which it is illustrated." The large and elegantly appointed building erected by the College of Physicians and Surgeons will furnish ample accommodation for what I believe would soon become the literary centre for the scientific activities of the profession in Ontario. In political circles we hear sometimes of the Eastern portion of the Province being envious of the rapid advancement of the Central and Western portion, but I can assure you that in *res medicales* no jealousy nor envy has arisen, and we would rejoice to see established in the capital of this fair Province the nucleus of what will develop in the future into a great "Exchange," where each may bring the results of his professional labors and there compare them with what his fellow-laborer may have accomplished towards the same end. I use the word "Exchange" advisedly, because I believe that with the future increased growth of our library it will be possible to send books by post to subscribers in different parts of the Province, while surplus specimens sent to the museum might be exchanged for others of a different character already existing in the museums of the medical schools throughout the country. Thus one of the needs of scientific medicine may be accomplished, and I trust that year by year we may note the growth and enlargement of such a spirit of devotion to a high scientific purpose as shall firmly establish a "Canadian Hunterian Museum and Library" for medical research and investigation, that will become the strongest power in this Province for the advancement of scientific medicine, and furnish a healthy stimulus to professional study in every part of Ontario.

Steps should also be taken towards furnishing greater facilities for post-graduate study, and for promoting pathological research. Now that public sentiment seems in favour of the Government establishing schools of practical science in different parts of the Province, could not we have a small portion of the surplus at present in the public treasury invested to good advantage by money grants to our Universities, on the condition that a

department shall be kept well equipped for pathological study. These are questions worthy of our consideration. History tells us that the greatest glory of ancient cities long since buried in ruins, was their universities and lyceums founded, reared and fostered by the patronage and intelligent generosity of wealth and power. While not advocating the expenditure of public money for medical education in the ordinary routine of college work, I am led to hope that in the near future our provincial authorities regarding, as they do, education as the corner-stone of our civilization, will decide to encourage the post-graduate study of medicine by liberally providing for our higher educational needs in that respect. The investment would certainly be a profitable one from every standpoint.

1. It would encourage a broader culture among medical men and would afford some who from their limited means are not able to go abroad, the opportunity of securing at home that preparation for their life work which would enable them to carry to the couch of suffering, better skill, greater devotion and a more comprehensive realization of the nobility of the work to which they have dedicated themselves. 2. It would be an incentive to the establishment of independent lectureships similar to the Gulstonian, Hunterian and others which are regarded with so much interest in England. 3. It would be the means of changing public medical opinion so that scientific attainments would become more honorable than mere professional success, which so often depends upon social rather than mental powers. 4. It would not only stimulate and develop a greater taste for study among medical men, but would also furnish as an outcome of the enthusiasm and intelligence of the Canadian scientific students who would be attracted to the halls of learning, such an amount of original work, as would have a great influence in unveiling the obscurities at present surrounding so many of lhe vital problems met with in every department of medicine.

During the past year there has been some discnssion regarding the degree of preliminary education requisite before entering the study of medicine. At the last meeting of the American Academy of Medicine (an organization composed only of members of the profession who have graduated in arts), an interesting debate took place on this subject, and the hope was expressed that before long the standard of matriculation would be so raised, that only those who had secured a University degree would be permitted to enter upon the study of medicine. Those who advccate this radical change in Ontario have, so far, not met with much encouragement, but nevertheless, the opinion is gaining ground that the standard must be raised, and the result of such action will, I believe, be most beneficial to the standing of the profession in our Province. In the meantime, I consider it would be advisable to place Theoretical Chemistry and Botany on the list of subjects for matriculation examination, and by so doing the student would have more time to devote to his purely professional studies.

I am pleased to notice that an honored member of the profession in this Province, whose reputation and ability in the field of literature is well known, has, during the past year, undertaken the task of writing a history of the Medical Profession in Canada. Such a work will no doubt be well received, and I trust the members of this Association will endeavour to do all in their power to encourage the author, Dr. Wm. Canniff, of this city, in the praiseworthy effort he has entered upon, and for which he has proved himself well qualified. The result of this latest effort of Dr. Canniff, will be eagerly looked for and will, I hope, find a welcome to the library of every physician in this Province.

It is a subject for congratulation that certain amendments to the Anatomy Act have been passed, and that in future our medical schools will be better supplied with anatomical material without violating the feelings of surviving relatives and friends. If surgery and medicine are to be practised with success, and in a scientific manner, the study of anatomy and physiology must be promoted and encouraged. That the dead must be dissected or that the living must be mutilated is quite certain, and it is satisfactory to know that at last the needs of our medical colleges will be supplied without any resort to the disgusting practice of body-snatching. Nothing can be more ridiculous than to suppose that the members of th medical prosession generally uphold the practic of human dissections, either for their personal ben fit or amusement; on the contrary, it is a proce which we regard as revolting in its nature, a one which, to our sorrow, we know is often mo

fatal in its consequences. Nothing but a laudable desire to acquire that knowledge which shall enable him to discharge his duty conscientiously and beneficially to his patients, could ever induce the anatomist to undertake it.

Medical science to-day embraces not only a knowledge of the living man, but also such facts, priciples, and materials gathered from every department of human knowledge, as may increase our resources for preventing or alleviating his sufferings, prolonging his life, and thus adding to the pleasure of his existence. The time has gone by when medical studies embraced little else than the fanciful theories and arbitrary dogmas of a few leading minds, each of which became for the time the founder of a sect or so-called school of medicine, with his disciples more or less numerous and influential. The age of theoretical dogmas and of medical sects blindly following some plausible leader is rapidly passing away, and in the development of the several departments of natural science, in the success attending pathological research and in the adoption of inductive processes of reasoning, we have every year to congratulate ourselves on the advancement achieved in medical science. This progress we can readily see by casting our mental vision over the broad domain of medicine and beholding the activity displayed in every department. Some are searching for new facts, and new materials, others studying new applications and better uses of facts and materials already known. We find some in the dead-house with scalpel and microscope tracing out the most minute structure and smallest micro-organism, while others are searching the forests, the earth and the air, and all alike are striving for more knowledge concerning the causes of disease, and for additional remedial agents to combat the different morbid conditions with which humanity may be affected. We find some in laboratories with crucible, test-tube and microscope, analyzing every morbid product and remedial agent, while others are separating the active principles from the crude materials, and demonstrating their actions on living animals in order that they may be of use to keep the vital spark in man; and while these are pursuing their researches, a great multitude of medical practitioners are at the bedside of the sick and wounded, applying the knowledge gained by all the other workers to the relief of human suffering. Well might Homer exclaim:

> The physician's skill the sick to heal,
> Is more than armies to a nation's weal."

Gradually, but with sure and steady progress, has the science of medicne advanced until it has become a vast aggregation of observed facts, many of them so related to each other as to permit of practical deductions of permanent value, while many others remain isolated through incompleteness of investigation and are still fruitful fields for study and research. To-day no more active, earnest, ceaseless and benificent field of labor is open to the world's vision than the one we ourselves occupy.

How important, then, that we each strive to contribute to the storehouse of knowledge some nuggets of truth from the fields of our observation and study. From such orginizations as this, we have surely a right to expect such a fresh impetus to be given to the progress of medical science as shall add to the pride of our Province, for nothing has done so much to develop and diffuse medical knowledge, to stimulate its practical and successful application both in sanitary measures for preventting disease, and in the direct alleviation of suffering at the bedside, and in unifying and ennobling the profession itself, as has been accomplished by the aggregate medical society organizations of the world.

THE RADICAL CURE OF HERNIA.*

BY ROSWELL PARK, A.M., M.D.
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Ever since the early days of surgery efforts have been made to devise ways and means of retaining, more or less permanently, hernial protrusions from the abdomen. Trusses and the operations for strangulated hernia were known to the ancients and to the surgeons of the middle ages. As the anatomy of the parts concerned became better known, and as the general principles of operative surgery were more strictly laid down, operative measures began to be described by which the desired result might be gained. To treat of these in detail would be to weary you; it is enough to say that their general purpose was the occlusion or the plugging of the hernial outlet.

Of course when we deal with hernia, we deal with an open canal and open rings, and the end to be gained is the closure or the stopping up of these, so that the abdominal contents can no longer escape through them; whether this be done by causing adhesive inflammation by the injection of irritants, or by obliterating them with plugs of

* Read before the Ontario Medical Association, June 5th, 1889.

tissue from neighboring parts, or by sewing up the openings, has been in the past to a large degree a matter of choice with the surgeon who operated. Each method has had at times its advocates and its enemies, and each has been modified in some way by him whose name it bears. In former days the testicles were often removed along with the hernial sac, and this practice was so frequent during the seventeenth century that Dionis relates that an itinerant operator was in the habit of feeding his dogs with these organs which he had thus removed. Not less cruel were some of the other and more modern devices resorted to for a cure of rupture. Gerdy, whose method was at one time in considerable vogue, practised invagination of the integument into the inguinal canal and its retention there by two sutures. The pouch of inverted skin was then denuded of its epithelium by strong ammonia, after which the raw surfaces were expected to unite under pressure. This operation was, in the light of our present knowledge, equally unscientific and unsuccessful, and it has often proved fatal. Velpeau, Pancoast and others have injected tincture of iodine into the sac, after total reduction of its contents with a portion of its neck. This method of course is now mentioned only to be condemned. Wutzer, of Bonn, introduced in 1838 an improvement of Gerdy's method, having devised an instrument especially for this purpose. A wooden cylinder was used instead of the finger to invaginate the skin of the scrotum into the inguinal canal. Through the end of this plug a curved needle was forced up through the layers of integument, and over it a wooden shield or cover was secured by a clamp and allowed to remain until the desired adhesive inflammation was obtained. I am able to show you here one of the original Wutzer instruments, which has in times past done as good work as this method will allow.

Passing over the various modifications of this operation, we come to the method of Dr. John Wood, of London, which consisted of a subcutaneous approximation, by a wire suture, of the tendinous structures around the inguinal canal and the consequent obliteration of that passageway. Prof. Wood has of late years modified his earlier operation in some of its details, though its general plan is about the same. History repeats itself constantly, and this operation which was successful in Prof. Wood's hands has signally failed in those of most others. A most ingenious modification of this method was suggested by the late Prof. Dowell, of Galveston. He closed the external inguinal ring by three subcutaneous interrupted sutures introduced with a peculiar needle. When I first saw this method demonstrated it seemed to me to be the coming operation, but almost every one who has tried it has been disappointed, because the cicatricial tissue intended to occlude the ring gradually stretches and the old condition once more returns.

These suture methods have much about them to remind one of the mediæval *punctum aureum* and the *royal stitch*, both of which were well described by Percival Pott, a century ago.

Next we must mention the method known as the Heatonian. This consists in the injection of an irritating decoction of white oak bark into the cellular tissue around the hernial sac, with the intention of deliberately provoking a reactionary inflammation and causing its plastic products to occlude the canal and sac by compression. It is applicable only to cases of reduceable hernia, and in execution is the simplest method of all. It is not without its dangers, and death has been in a few cases the result of the inflammation thus set up. Having never been devoted to it myself, I prefer to let those more familiar with it speak of such merits as it possesses. For my own part, while recognizing those merits, I must say that I vastly prefer the operation which I shall subsequently detail, and for reasons which I will try to make plain.

In 1861 the late Professor Gross operated by closing the external ring with interrupted wire sutures, but so far as I can learn contented himself with this and did not attack the hernial sac. In the edition of his "Surgery" of 1872, he speaks of what he had done as being the most direct and rational way of operating for radical cure. But long before he did this the sac had been extirpated and its neck ligated, both by Schumacker and by the elder Langenbeck. However, to Czerny, of Heidelberg, belongs the credit of formulating and recommending an effective and radical measure for the cure of this infirmity. This he did in 1877, and while his procedures have been somewhat modified by other operators, the general idea upon which his method is based has not been improved upo

His procedure includes two different features; first, the isolation and extirpation of the hernial sac, and second, the effective and permanent closure of the hernial rings or outlets. If the sac contain adherent omentum or intestine, adhesions must be separated and intestine returned; omentum may be either returned or ligated and removed. If there be no adhesions complete reduction of the hernia is of course made before the extirpation of the sac is carried out. In cases of congenital inguinal hernia the sac must not be extirpated, because to do that would be to extirpate the tunica vaginalis. In such a case the sac should be separated from the spermatic cord, ligated near the testis and near its neck, and the intervening portion divided or, if long, extirpated.

Before describing at length the procedure which I now almost invariably follow, I desire to give very briefly a few of the other operations that are practised by surgeons, domestic and foreign, with more or less benefit to the patient.

In the *British Medical Journal* of December 10, 1877, Dr. C. B. Ball has described a method of obliterating the sac by giving it a number of twists after it has been isolated from its surroundings. This method of torsion is quite similar to that employed upon arteries and is practised with virtually the same intent. After the twisting the sac lies coiled up in the neighborhood of the internal ring and is supposed to act as a plug by which that opening may be occluded. It has been found that, when this torsion is practised, a ligature is unnecessary, though for my part I should prefer to ligate the neck of the sac, no matter whatever else is done to it. In the journal above quoted, Ball reports twenty-two personal cases with three partial failures.

Prof. Macewen has described at length, in the *Annals of Surgery* for August, 1886, a method of operating peculiar to himself. He separates the sac well up to the internal ring, then doubles it into folds, thus making a sort of plicated cushion ›ugh which a catgut suture is passed, by means ›hich the folds are held together. He then ırates the peritoneum a little way around the ›rnal ring and sews this folded-up sac into or ut the opening. After this he closes the in-ıal canal with sutures. He does not allow .ents to leave their beds until six or eight weeks ~ elapsed, and not even then does he permit them to engage in severe labor. He has reported eighty-one cases with one death, and aside from this no failure. The minute details of his operation can only be understood by reference to his diagrams in the paper just alluded to.

Dr. McBurney, of New York, is in the habit of practising what we may call an open method of treating these cases. He first extirpates the sac and then leaves open the wound, including the external abdominal ring, and awaits closure by granulation with its ensuing cicatrization. It will be seen that this method requires in a marked degree confinement to bed and slow healing.

Dr. Banks, of Liverpool, has practised a method in most of its details like that which I shall describe to you, and has reported fifty-two cases of medium-sized non-strangulated hernias with two deaths, sixteen large non-strangulated hernias with four deaths, and thirty-eight cases of strangulated hernia in which the operation for radical cure was combined with that for the relief of strangulation, with three deaths. It will be seen that in sixty-eight non-strangulated cases he has had six deaths, a proportion unusually large, which seems almost inexcusable. Out of sixty-six reported cases he has had fourteen failures.

(To be Continued.)

HOT WATER IN THE MANAGEMENT OF EYE DISEASES.*

BY LEARTUS CONNOR, A.M., M.D.

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My second proposition is: *Hot water will wash away or destroy or render less harmful morbific agents in and about the eye during the progress of many diseases.*

Concerning the first part of this statement there can be no difference of opinion. All will grant that hot water will wash out of the conjunctival cul-de-sacs, secretions, excretions, products of inflammation, foreign substances, etc., as readily as any other liquid. Few will doubt that it will do it better even than cool or cold water. As a mechanical detergent for the eye, hot water stands first.

2. Water at a temperature of from one hundred

* Read before the Ophthalmological Section of the Ninth International Medical Congress.

and ten to one hundred and forty will certainly check some forms of putrefaction. It matters little whether it does this by rendering less active the germ agent which produces the mischief or by repairing its damages, or by rendering the tissues less susceptible to its ravages. The practical end is the same. I have so frequently observed the changes in the secretions of the eye under the influence of hot water that I am positive as to the result. Concerning the exact *modus operandi*, I am not in a position to express a positive opinion.

Dr. Heyl (*Archives of Ophthalmology*, September, 1886) gives reasons for believing that hot water acts beneficially in purulent ophthalmia, by placing the tissues in a condition unfavorable to the growth of Gonococcus of Neisar. The same thing is done by the application of nitrate of silver. Hence he commends in this form of disease applications every three hours of a weak solution of nitrate of silver, carefully neutralized with constant applications of hot water.

Dr. Geo. Sternberg (*American Jour. of Medical Sciences*, July, 1887) gives some experiments made to determine the degree of heat necessary to destroy different micro-organisms. He found that a temperature of 132° Fahr., was fatal to the bacillus of anthrax, the bacillus of typhoid fever, the bacillus of glanders, the spirillum of Asiatic cholera, the erysipelas coccus; the virus of vaccinia, of rinderpest, of sheep pox, and probably of several other infectious diseases. As the eye will endure a much higher temperature without injury, as we have demonstrated, it is clear that at least some micro-organisms may be destroyed by the use of water of such a temperature as may safely be applied to the eye. The principle being established, farther observation will determine the limits of its application, and it will become a recognized factor in the management of such diseases of the external portion of the eye as are caused or maintained by mico-organisms.

My third proposition is, that *the local application of hot water to the eyes, in the manner described, promotes the healthful activity of the living protoplasm or living matter.*

One function of living matter is to separate from the blood currents such elements as are required for the repair of worn-out tissues, and elaborate them into tissue proper. Another scarcely less important function is to remove the broken down or effete materials. Upon the proper performance of these two functions the integrity of any portion of the body depends. That the regulation of the blood currents is essential to such performance is self-evident. Perhaps this may explain the quickening of reparative processes, observable when the eye is suffering from conjunctival or corneal inflammation. Still I think we must look farther for an adequate cause. Other remedies, notably cocaine, are capable of contracting blood-vessels, but they also, in some manner, interfere with the nutrition of the parts, so that they are harmful in purulent corneal troubles, and of doubtful utility in other conditions.

It is well known that each portion of the body thrives best when kept at a given temperature. When it is enfeebled by disease, a different, and generally a warmer, temperature is called for. In other cases a lower temperature is demanded lest the parts be destroyed by the excessive heat. The temperature must be elevated or lowered, as called for under such varying conditions. It would seem from this statement of the case that the natural application to an eye, when its temperature was elevated by an acute purulent inflammation, would be cold. But I have often seen the temperature lowered nearly to the normal by the local application of hot water. When this can be done it is a safer line of practice. That it can be done in every case I cannot affirm, as my observation is limited to a few cases, but in none of these was an exception found. I have explained this effect by assuming that a better circulation through the diseased parts was effected, some of the morbid materials were removed, and the living tissue placed in such conditions that it could act more effectively in resisting the encroachments of morbific agents, and better repair damages. This is not singular as applied to eye diseases, as it has been observed in many other organs, and, to the study of general medicine, may seem trite.

My fourth proposition is: *Hot water has grea power in relieving muscular fatigue and spasm.*

Like all other muscles, those of the eye ofte weary after excessive use. When ocular defect exist fatigue is earlier and more marked. For th relief of this distressing condition I know nothin so efficient as hot water. In the researches of Dr Murray, already referred to, he gives some exa-

studies of the uterine muscle, as acted upon by hot water. He found that the application of water at a temperature of from one hundred and ten to one hundred and twenty degrees Fahr., caused the muscle to contract almost instantly. The relaxation was from twelve to twenty times the duration of the contraction. Successive applications were followed at once by a response. The efficiency of the contraction was greatly increased. The periods of relaxation and maximal contraction were much increased. In four experiments there was a gain of four times the initial efficiency. Continuous application induces a high degree of contraction, broken by secondary waves of partial relaxation and contraction. Thus the applications of hot water actually increase the contractile power of the muscles.

On the other hand, he found that water at a temperature of from thirty-two to sixty degrees Fahr., caused the muscle to contract slowly, produced a relaxation three times the duration of contraction, and destroyed the power of contractility except after a period of rest. Continuous application of the cold water produced rapid exhaustion of the muscle, so that it soon failed to respond, being completely relaxed.

From these data it would seem evident that in cases where it is desired to increase the efficiency of the muscles of the eye, the use of hot water is clearly indicated, and that of cold contra-indicated. It matters not how the exhaustion be induced, hot water is a most efficient agent in relieving it. Frequently in cases of insufficiency, moderate in extent, of one or more of the recti muscles, we have seen it cease to trouble the patient after a continued use of hot water locally applied. In most cases, however, it is necessary to correct existing defects by the use of prisms, changing the insertion of the muscles, etc., the hot water affording only temporary relief. After operations for squint I always order the local application of hot water for a considerable time, in order to bring the mus- s most quickly to their greatest vigor and so ible me to ascertain the full effect of the opera- . The liability to over-correction is thus mate- y diminished, because the full effect of the first ration is more accurately determined before the is performed. No doubt hot water induces se effects by other means than by its direct on upon the muscles of the eyes, but it is to latter that we now direct attention.

Admitting the propositions advanced to be substantially correct, what is their practical application to the management of eye diseases? It seems to us that every thoughtful student of such cases will at once be able to designate numerous conditions in which the patient would receive great benefit from the local use of hot water.

Active and passive congestions and inflammations, both without and within the eyeball, would all be benefited by so regulating the current of blood through the eye so as to enable it to approach the normal standard. It is not claimed that hot water will do this in every case, but it will materially assist such other remedies as may be employed for this purpose. In the external diseases there is always some morbific agent, which this use of hot water will remove. And finally, in every case the diseased tissues need all the assistance afforded by hot water to enable them to return to a normal condition. The list of extra and intra-ocular inflammations is a long one, and need not be enumerated here. All will be more or less benefited by the common-sense use of hot water, to the extent of obtaining its physiological and therapeutic effects.

Another class of cases in which the effects of hot water are very desirable are those in which muscular strains, weaknesses and pains form a part. Of course, the cause of these muscular derangements must be ascertained and, if possible, removed. This being done, most cases require no farther attention, but, meantime, the hot water adds materially to the patient's comfort and expedites the recovery. Sometimes this can be but imperfectly accomplished, or not at all. Here the regular use of hot water two or three times a day, for from ten to twenty minutes at a time, more or less, according to the nature of the case, will greatly add to the patient's comfort, and materially enlarge the working capacity of his eyes.

Another class of cases benefited by the local application of hot water are injuries to the eye. In such cases as admit of its use, hot water renders the patient more comfortable and materially hastens the reparative process.

Doubtless an occasional idiosyncrasy may interfere with the use of hot water in a special case, but I have seen few such cases. Almost invariably, aside from the trouble, the patients are so materially relieved by the applications that

that they are greatly pleased. Hence they are the more ready to endure the trouble called for by the treatment.

I desired to detail typical cases, with the actual treatment in each, as illustrative of the use of hot water in the manner described. But time forbids. In conclusion, I present the following summary of the points I have endeavored to make plain:

1. The best effects of hot water in eye diseases can only be obtained when the water is so used that it comes into direct contact with the eye. In practice, this is best done by means of a common tumbler filled to the brim with water at the appropriate temperature, and so adjusted to the face that the eye is immersed in the water.

2. By hot water, in this connection, is understood water at the highest temperature the patient can endure, viz., from 105° F. to 140° F. Lower temperatures produce quite other effects than those desired.

3. The hot water must be applied long and often enough to accomplish its peculiar effects.

4. The peculiar effects of hot water are: (*a*) The contraction of blood-vessels both within and without the eyeball, reducing them to a size approaching, if not equal to, the normal. (*b*) The removal of some of the causes of disease, if such exist, on the conjunctiva or other external portions of the eye and the rendering of other causes less harmful. (*c*) The promotion of a greater reparative activity of the normal living matter about the morbid material. (*d*) The removal of muscular irritation or spasm and the promoting of the normal vigor of the muscular tissue.

5. Finally, hot water does its work without any shock to the nervous system, or without any loss to the actual energy existing in the eye, and without any possible harm to the eye.

6. It is the one application that has no disadvantages or drawbacks aside from the trouble that it involves.

Correspondence.

To the Editor of the CANADA LANCET.

SIR,—At the last meeting of the Pathological Society of London, at which I was present, Mr. Shattoch, of St. Thomas' Hospital, read a paper on the case of a young woman who was suffering for six years from a lump in the breast, which, on removal, presented all the characteristics of tubercular disease.

The author of the paper pointed out that this disease had been almost overlooked by most observers, and he ventured to advance the theory that many cases of chronic or cold abscess of the breast, and of chronic mastitis ending in suppuration, were of tubercular nature. He further stated, that in the cow, tubercular disease of the udder had been extensively investigated, and bacilli had been found in the milk. The question then arises, if tubercular disease of the mamma be so common as Mr. Shattoch leads us to suppose it necessarily is, viewing, as he does, all or nearly all chronic abscesses of the breast as tubercular, whether mothers so affected will infect their children with general tuberculosis? To illustrate this he cites a case in which a woman whose milk contained bacilli infected a child, born of perfectly healthy parents, with general tuberculosis.

In the discussion which followed the opinion seemed to be that a mother would not so infect her offspring, although a nurse might infect the child she was suckling. For myself, I cannot quite see why a nurse may infect a child which the mother does not. The further question was also discussed, as to whether a child may receive infection through the milk of a person suffering from tubercular disease other than that of the mammary gland. Mr. Shattoch thought it extremely doubtful that infection ever arose from milk unless the seat of the disease was the mammary gland itself.

The point in question is of extreme interest, as if we look upon every chronic mammary abscess as tuberculous, and the milk in consequence infective, it would be the duty of all practitioners to prevent mothers so affected suckling their children, and thus would children already possessing, and having in all probability a weakly constitution, be cut off from that best of all food for the infant, the mother's milk.

R. EDEN WALKER

Toronto, June, 1889.

To the Editor of the CANADA LANCET.

SIR,—I notice in the June number of the L CET two prescriptions by Dr. J. B. Johnson, wh. he presents as valuable discoveries of his own, which he states he has given for croup for m

years. Both formulæ contain chlorate and iodode of potassium mixed in solution. The latter and much the shorter of the two prescriptions stands thus:—R—"Potassii iodidi, ʒj. Potassii chlorati, ʒ j. Aquæ destil, ℥ vi.—M. Sig.—Shake well and give a tablespoonful every quarter of an hour, or half-hour until relief is attained."

This dose appears to be for young children any thing over "six or eight months."

Now the United States Dispensatory for 1883, states that "M. Melsens has ascertained by experiments upon dogs that if iodide and chlorate of potassium are given together, so as to be in the system at the same time, they act as a poison, and may cause death in a few days. 108 grains of a mixture of iodide of potassium in equi-valent proportions, given daily to a dog of medium size, often proved fatal as early as the fifth day. He ascribed this result to the production of iodate of potassium, which he has shown to be a poisonous salt." This very important fact must render the above discovery somewhat risky.

M. A. B. Smith.

Dartmouth, June, 1889.

OUR NEW YORK REPORT.

From our own Correspondent

New York, June 20th.

MEETING OF THE NEW YORK ACADEMY OF MEDICINE, MAY 1st.

The subject of pulmonary phthisis and its relationship to the tubercle bacillus was thoroughly discussed. It is to be regretted that nothing new was advanced, but it may be of interest to your readers to show the stand taken by the profession here, and what now seems to be the final settling of this much debated question.

The first paper, "The relationship of the tubercle bacillus to the etiology of pulmonary phthisis," was read by W. R. James, M.D.

He began by stating that the primary meaning of ercle was confined to a nodular mass; subiently these were classified, but even this ification is now obsolete. In 1865, Vellemin ed by experiment that tuberculosis was infecis, by inoculating animals with tuberculous terial. In 1882, Koch discovered the tubercle lus and advanced the view that all tubercles due to the tubercle bacillus. The subsequent seven years have confirmed his views, so that now it is regarded as essential that the tubercle bacillus must be present in every tuberculous nodule. Phthisis is nothing more or less than pulmonary tuberculosis, and he thinks that all phthisis is due to tubercle bacillus. Dr. James' views might be summed up by stating that the only cause of pulmonary phthisis is the tubercle bacillus or its spores.

Discussion.—Dr. Tyson, of Philadelphia, firmly believed in the tubercular theory. His reasons for so doing were founded on the well known methods of proving in bacteriology; they might be briefly related as follows:

(1) The organism must be found in the blood and tissues; (2) it must be capable of being removed in absolute purity; (3) it must be introduced into the animal in a state of purity and give rise to the disease; (4) it must be found in the animal diseased.

All these conditions had been fulfilled by the tubercle bacillus so that it must be considered that it is contagious; but in reality it is only slightly so, for the reason that the sputum has to be inspissated and inhaled into the lungs before it can give rise to phthisis. He then gave some account of the communicability of tuberculosis by the alimentary canal. The first cases were reported by Gerlach, of children contracting tuberculosis of the canal and mesentery glands, by drinking tuberculous milk. Canil, in 1888, introduced cultures of the tubercle bacillus into the alimentary canal, and in four days found them in the mesenteric glands. Mater, relates the case of a patient who swallowed his tubercular sputum and in ten days had diarrhœa from a tuberculous ulcer of his intestine. Another incident is related where chickens swallowed their master's tubercular sputum as he expectorated in the yard, and after death they were all found to have tuberculosis of the liver. He concluded by stating that the tenacity of the life of the bacillus was from thirty days to six months.

Dr. H. N. Biggs stated that the experiments are conclusive, the only direct factor in the etiology of phthisis is the tubercle bacillus, all other factors, such as hereditary tendency, exposure, unhealthy surroundings, etc., only act by reducing the resistance of the tissue to such a state that a slight dose of the bacillus will give rise to tuberculosis. He believes, 1st. That phthisis is con-

tagious. 2nd. That it is preventable, and that the great problem in the future is the prevention of phthisis.

Dr. H. P. Loomis thought that Dr. James had given the question as it stands at the present day. He believed that phthisis was not such a fatal disease as the general profession considered, as in over 60% of his antopsies in Bellevue he had found evidence of a previous phthisis which had gone on to complete recovery; but that these cases were very liable to a secondary eruption of tubercles, as the autopsies had proved.

Dr. Trudo presented specimens (1) tubercle bacillus growing on a potato: (2) miliary tuberculosis produced by the injection of tubercle bacillus in the ear, in twenty-five days, the animal being kept in unhygienic surroundings: (3) a specimen where tubercle bacillus had been injected into the apex of the lungs, but the animal being kept in hygienic environments, only pulmonary phthisis and fibroid tissue had developed.

The next paper was "The Relationship of the Tubercle Bacillus to the early Diagnosis and Prognosis of Pulmonary Phthisis," by J. W. Roosevelt, M.D. He intimated that he had nothing new to add to the already accepted views; he considered that if the tubercle bacillus was found in the patient's sputum, we were justified in stating positively that the patient had phthisis. In the early diagnosis it is of great value. Take for example the case of a boy with phthisical history: has slight cough, etc., of some duration; the question is, has he phthisis? Physical examination is negative; if the bacillus is found in the sputum we can say positively that he has phthisis, if no tubercle bacillus can be discovered we are not justified in stating that he has phthisis. Many cases of tuberculosis give none or only unsatisfactory physical signs, for the reason that the tubercles are scattered and disseminated through the lungs. In these cases some of the tuberculous matter may be emptied into the bronchi, and thus we are able to find the bacillus and diagnose phthisis. As to prognostic value, he considered it had none, as a rapidly failing patient may have only a few bacilli in the sputum and a comparatively healthy case of phthisis may have myriads; it only shows the amount of cheesy tubercular matter that is emptied into the bronchi. He then commented on the utter absurdity of the present antiseptic treatment, as the amount of any of the present germicides that can with safety be introduced into the blood is so small in comparison with the bulk of the blood, that it has no antiseptic power whatever. He concluded by stating that the discovery of the tubercle bacillus in the sputum was of great positive but no negative value in reaching a diagnosis. As to prognostic value, it had none.

Dr. Waldstein discussed this paper and entirely concurred with the views expressed by Dr. Roosevelt. Dr. Wm. H. Thomson then read a paper entitled "The Influence of the Tubercle Bacillus on the Treatment of Pulmonary Phthisis."

The first attempt at antiseptic treatment was made by Rokitansky, in 1878, who used inhalations of sodium benzoate, and reported good results. In 1882, Koch announced his discovery of the tubercle bacills, and this at once gave an impetus to the antiseptic treatment. Johnson, the same year, used salol and iodoform, 3 to 8 grains, either internally or by inhalation, under this it was claimed that night sweats, cough and expectoration diminished. Dr. Thomson stated that he had used iodoform in 86 cases in Bellevue and Roosevelt hospitals, but has never been able to see any good results from it. Bergeon's method by hydrogen sulphide is an utter failure. Bichloride of mercury, tannin, acetate of lead, menthol, creolin, creasote and hydrofluoric acid, inhalations have been used, but no very favorable results have been obtained from any of them. Cornet of Berlin, first inoculated animals and then tried all the known germicides upon them, and the conclusion that he reached was that not one case was benefited, although several animals died from the effects of the drugs. He believed that the main danger of phthisis is suppuration due to the entrance of the streptococcus pyogenous which are found in abundance in all phthisical cavities, and it is against this suppuration that we should direct our treatment. He had found creasote in the form of a pill composed of creasote 1 gr., bismuth 2 grs., three times a day, the most efficacious of the antiseptic remedies and instanced several cases with well marked cavities, who, under this treatment, had entirely recovered. As a general practice, however, better results were obtained by climate and restoration of the general system by cod liver oil, etc.

Dr. Westbrook, in the discussion, thought that the discovery of the bacillus has been pernicious in that it had caused the introduction of many antiseptics which were not only useless, but deleterious to the patient.

Dr. Kinnicutt considered the antiseptic treatment of no value; he had however, found creasote of some service, but thought it was due to the stimulating action of the drug and the nutrition the general system.

Selected Articles.

CLINICAL LECTURE ON HYSTERIA, NEURASTHENIA, AND ANOREXIA NERVOSA.

BY J. MATTHEWS DUNCAN, M.D.

Delivered at St. Bartholomew's Hospital on March 7th, 1889.

GENTLEMEN,—I feel self-convicted of audacity and almost of folly in encountering in a single clinical lecture a subject so vast, so difficult and so little known. In your practice in this department scientific attainments will not be of so much avail as in others. It is kindness of heart, wisdom and firmness that are the specially useful talents. No doubt these qualities are in all circumstances valuable in practice as well as for their own sakes, but their application is at least less direct in the treatment of a uterine catarrh or in an ovariotomy than in the management of a hysterical or of a neurasthenic patient. They are not to be taught or learned in a lecture room, but it is my duty to point out their supreme importance in this great department of practice. If your patient thinks you are not sympathetic, she soon becomes alienated from you; if you are not wise in your proceedings and resolute in adhering to them, you will probably do harm rather than good.

Hysteria has alliance with insanity: it perverts the patient's judgment It is ill-defined, and for this and other reasons patients dislike such affections in a sense in which they do not dislike many other tangible, easily intelligible diseases. If a patient is hysterical, and is told that she is hysterical by one physician, while another does not tell her this, but that she has some slight displacement of the womb, be sure she will prefer the latter. Yet the one is wise, the other perhaps more than foolish. In practice you have firmly, yet without the appearance of sternness, to do your duty with simplicity, and at the same time maintain the confidence of your patient. Firmness and simplicity are the surest means of preserving your patient's confidence; but know and remember this, that in the class of cases now under consideration you will certainly lose your patient occasionally if you do your duty, and such loss is to be met quiet-
ly and even with joy. It is easy, and unfortunately
ommon, to educate a patient into hysterical dis-
ase with its attendant misery to herself and family,
nd very difficult to educate out of it; and the
rocess of cure is to a great extent one of educa-
on. Consider the wisdom and tact required in a
ew and untried physician to successfully educate
patient out of injurious notions instilled by an
d and respected friend and physician. Some
unted and successful modes of so-called cure are
in themselves of no power directly, but are efficient by eradicating from the patient's mind former bad medical education. A patient with an endless string of complaints may be quickly cured by a pessary for a displacement which does not exist, or by a dose of electricity, or by the last new fad, or by being forced or shamed into good habits. Do not condescend to cure patients in such ways. Be kind, wise and firm; be direct and simple. This is the best because the most successful plan. It involves no untruth, no feint; it prevents and cures tens for the units cured by roundabout proceedings.

A story may impress this lesson. More than a year ago a patient came to me with aphonia. She had had it more than once previously, she said, and it had been hard to cure. Electrical shocks had been used. I said it would soon go away and refused any kind of treatment. More than once I had letters of lamentation at the persisting aphonia. Then she went to Brighton to reside with her relatives, who compelled her to press for treatment, which I again declined. Then a consultation was insisted on with a specialist. To this I yielded. The specialist found no disease, and suggested electrical treatment after a fortnight of further waiting. At the end of a fortnight I was again appealed to, and adhered to my original plan—no treatment, electrical or other. She went back to Brighton not well pleased. In a day or two she wrote to me that her voice was now as good as ever, and it remains so. She will not again have aphonia—as long, at least, as she continues to be under my care

The name "hysteria" is much and often objected to, because the Greek root of it is "the womb." But it is not in anyone's power to make the profession give up its use or adopt another. Nor is it desirable that change should be made, otherwise than as the result of scientific progress. Many terms remain, not cavilled at, whose original meaning is lost or forgotten. Time has clothed them with a new meaning; and it so is with hysteria. I shall not even attempt to define hysteria. Old authors defined it and described it, and they made a horrid and amusing mess of it. The womb was represented as almost a distinct being, having *imperium in imperio*, travelling through the body or sending out spirits to various parts, creating disturbance wherever it or they went. Now it is well known that hysteria is essentially not a womb disease—not truly hysteria. It may occur before the womb is potent, and after its potency is past; and it occurs in men. But it may be said to have alliance with the womb, or with the generative organs generally, because it is far more common and more severe in women than in men, and it prevails chiefly during the period of activity of the genital system of organs. It is a gynæcological disease in this sense, and it especially attaches it-

self to the generative system, because the genital system, more than any other, exerts emotional power over the individual, power also in morals, power in social questions. In these respects the stomach, or even the heart, have comparatively littly influence. Though the womb cannot travel through the body and produce diseases, yet in the hysterical state any part of the body may be affected, and many diseases may be mimicked more or less imperfectly; or novel combinations of symptoms may arise. When the word "mimic" is used, it does not always imply conscious imitation by the patient, nor does it always imply close resemblance to the disease imitated. Sometimes the so-called mimicry is very imperfect; sometimes so complete as to mislead, for a time, the most experienced and careful observer.

There is, as I have said, alliance between hyteria and insanity; and in most cases you can find a morbid desire of attention and sympathy—a kind of selfishness. Many cases are indeed fully explained by this, but there are also many where it is difficult to trace it. On the one hand, you have women whose hysterics are never seen except in a suitable presence and on suitable occasions; on the other, you have many cases where the women do not doubt the reality, as it is called, of their complaints. Before the days of anæsthetics, cases occurred where women attested the sincerity of their convictions by enduring the agony of a great amputation for mere hysterical disease. Cases of the former kind are often classed, and often unjustly, as "humbug." Cases of the latter kind are often classed, and often erroneously, as "real." The former class is often cured by wholesome neglect—always aggravated by indiscreet attention or sympathy. It is this class which has brought the name "hysteria" into disrepute, so that it is extensively regarded as a sneer or an insult to label a woman with it. But the name is still very useful, and I think its use may be with advantage rehabilitated. Much evil has, indeed, arisen from giving it up, the result being to conceal an important character of disease, invaluable in guiding the practitioner. For example, the common hysterical retention of urine has been often treated as if it were "real," not "hysterical"; and, unfortunately, this is now done under the ægis of a great author.

Here let me refer to recent observation and operative experiments which may seem to you to traverse the views I have been inculcating. Certainly they are founded on the belief that the genital system, especially the ovaries, are sometimes the seat or origin of epilepsy and some of its hysterical modifications. Oöphorectomy has been often performed for the cure of so-called ovarian epilepsy—epilepsy connected with the menstrual function. Some forms of epilepsy and hysterical convulsions and hystero-epilepsy are not pathologically remote from one another. Now, that epilepsy may own an ovarian origin no one will deny. But the cases operated on do as yet offer no support to the view. The epilepsy has not been subdued as was expected; and I believe this kind of operative treatment is given up. Only two days ago we had in "Martha" a case in which oöphorectomy for epilepsy had been performed in vain. The operation was by a surgeon eminent in the department, yet it is not a good test, for menstruation is regular now, years after the ovaries were, as it is believed, taken out. Again, curious hysterical convulsions or tetanic phenomena—hystero-epilepsy—have been declared to be goverened by pressure on the ovary by the practitioner's hand applied over it, the phenomena disappearing when the pressure is exerted vigorously, and recurring when it is taken off, much as water from the tap is stopped or flows as you turn the cock this way or that. These observations I merely mention. They are so unsatisfactory and so badly controlled as to be worthless. Directions are given to find the ovary by the intersection of lines on the abdomen; they also are worthless. Pressure over the supposed position of the ovary is made while the abdominal muscles are in tetanus, and such pressure is worthless. The observations are, indeed, poor exhibitions of the power of a clever doctor to educate a woman into a hysterial "humbug."

But though the particular observations and experiments, of which I have been speaking, have given us little instruction, the restless work of many neurologists has not been without result. The observed grouping of symptoms and consequent ranging of affections into categories is a sure step to farther progress. Already we seem to have reached a great clinical distinction between hysteria and neurasthenia; and we have also made out the anorexia nervosa of Gull—an interesting malady, and rare, at least in its highest degree. The meaning of this recently introduced term, neurasthenia, lies on the surface: its exact definition is a difficult matter. It is a common and therefore an important disease, and it is of great practical or clinical interest to distinguish it from hysteria. I have said that its definition is a difficult matter, and this arises greatly from the fact that it is used indiscriminately, or has been so used that it is only gradually crystallising into any kind of definition. It has been and is much used as an alternative word for hysteria, to avoid using that often offensive term. But hysteria maintains its place, and neurasthenia has to find—or has found—its own. Confusion often arises from the two conditions being combined. A women may exhibit no hysterical symptoms until she has become neurasthenic. Her neurasthenia cured, the hysteria disappears. To see clearly the distinction between the two diseases, you must take characteristic uncomplicated examples of each. Hysteria may effect strong, robust, vigorous women,

with no other functional disorder. It would be a contradiction in terms to say this of neurasthenia. A neuaasthenic may be fat and healthy-looking, and have no other functional disorder; but generally such patients lose flesh, are sallow, and look unhealthy, and they often suffer from distinct forms of indigestion and from constipation. A hysterical woman often shows great power and capacity of both mind and body. A neurasthenic has lost elasticity and power, or endurance both of mind and body; the nerves are weak. Above all, a hysterical woman is selfish—she wants attention and sympathy; while in a neurasthenic no such special demand for sympathy is made. The hysterical are found chiefly, though not exclusively, among the pampered, the lazy, the unemployed. The neurasthenic are found chiefly among the intellectually overworked, and the worried or morally overworked.

Considering these differences between hysteria and neurasthenia, you need not be told the great difference of treatment. In hysteria drugs are of little avail directly; often injurious, misleading the patient as to the nature and management of her case. Valerian, assafœtida, musk, castor, and other stinking things may have some mysterious potency, and so may the so-called nervine tonics. But your reliance is to be placed mainly and often exclusively, on maintenance by regimen of health of mind and body. It is chiefly by moral influence that hysteria is to be cured; and the first place in moral management is held by the discreet use or disuse of attention and sympathy. Neurasthenia is to be managed in a different way, and among remedies the first place is held by rest, especially rest of mind; then come change of air and scene, and the remedies demanded by any special disorder of health.

Before concluding, let us return to consider for a few minutes the anorexia nervosa which I have already mentioned. What is it? To answer this question, let us take bad or characteristic cases; for less marked examples, though more common, are not suited for helping to form a picture of it. A good example is one of the most ghastly spectacle you will meet with in practice, but the sadness of the picture is relieved by the fact that they all recover, and recover completely. I daresay the disease occurs in men, but I am not aware of a case. The patient loses appetite and becomes ema-ted. The catamenia cease, and, if the woman narried, fecundity is arrested. The bowels arc y constipated, the stools dry and hard. There io increase of desire for attention and sympa-; on the contrary, the patient is inclined to rve and seclusion. The patient makes little or complaint; it is her friends that complain for . There is no noticed weakening of the mind. re is great desire for exercise, especially walk-rercise; the patient has a degree of *festinatio*, and does not get tired, does not want to rest. Here you recognize a disease quite different from hysteria and neurasthenia.

The best example which I know of occurred in the granddaughter of a great physician, whose perplexity was heightened by sympathy and the utter novelty of the case. The patient was generally healthy, even robust. She had been for some years married, and had borne a child. The date of the commencement and of the termination of her illness cannot be given; both were so gradual. The disease lasted for about three years. During all the time there was amenorrhœa and very obstinate constipation. The patient looked like the corpse of one dead from starvation. The skin was cold, sallow, and without lustre; the eyes healthy, sunken, and with a dark surrounding areola; the tongue clean; the pulse very slow, and only perceptible at the wrist; the breathing slow and very shallow; the urine healthy. The emaciation was not removal of adipose tissue merely, but also of muscle; for example, it is scarcely an exaggeration to say there was no gastrocnemius. She forced herself to take a fair amount of nourishing food, but always would prefer to abstain. She had a great desire for walking and great sustained power of doing it, and she walked very quickly, not at her usual pace. She preferred greatly walking to driving with her grandfather, who naturally had difficulty in consenting to allow her to walk so much as she did, seeing the shrunken atrophied state of the thighs and legs. Drugs were used in vain. She was urged to eat and drink. She was anointed and rubbed with oil. She was pressed to lead an inactive life. In course of time her health was in all respects restored—gradually. She began again to bear children, and is now a healthy, plump woman.—*Lancet.*

NOTES AND COMMENTS.

USEFUL FORMULÆ IN SKIN DISEASES.

Dr. M. Epstein gives the following formulæ as in use in the service of Dr. W. A. Hardy, at the skin clinic of the St. Louis Post-Graduate School of Medicine:

℞.—Unguenti vaselini plumbici, . ℥ iv.
S.—Spread on cotton cloth.

One of the most universally applicable and valuable ointments in eczema is the diachylon ointment of Hebra; but owing to the difficulty of preparing it after the original formula, it is now generally made by melting together equal parts of vaseline and lead plaster. It should be neatly and evenly spread on strips of cotton cloth, and fastened to the parts with a roller bandage.

℞.—Ung. picis liquidæ, . . . ℥ ss.
Ung. aquæ rosæ, ... ℥ jss.
Zinci oxidi, ... ℥ j.—M.
S.—Spread on lint.

This is of special value in the eczema (chronic?) of children.

℞.—Ol. rusci, ... f ℥ j-ij.
Ung. aquæ rosæ, ... ℥ j.—M
S.—Rub in thoroughly.

Useful in squamous eczema and also sometimes in psoriasis.

℞.—Hydrargyri ammoniati, . . ℥ ss.
Liq. picis alkalin, . . . f ℥ j.
Ung. aq. rosæ, ... ℥ j.—M.
S.—Local use.

Employed in infiltrated eczema and in psoriasis of the scalp. It must not be used over too large a surface.

℞.—Acidi salicylici, ... ℈ j.
Sulphuris præcipitati, . . . ℥ j.
Vaselini, ... ℥ j.
Ol. rosæ, ... q. s.—M.
S.—Rub in thoroughly.

The range of application of this preparation is very wide, viz.: seborrhœa and scaly eczema of scalp, tinea versicolor, keratosis senilis, and lupus erythematosus.

℞.—Emplastri plumbi, . . . ℥ xxv.
Pulv. saponis, ... ℈ jv.
Aquæ, ... q. s
Vaselini, ... ℥ v.
Camphoræ, ... gr. xx.
Acidi salicylici, ... ℈ v.—M.
S.—Spread on lint.

This is a modification of Pick's compound salicylate soap plaster. It is much prescribed in the clinic for infiltrated eczema, especially of the hands and feet, and is now largely used in place of the more expensive Hamburg plasters of a certain kind. The amount of salicylic acid may be varied to suit the case.

℞.—Chrysarobini, ... gr. xl.
Acidi salicylici, ... gr. xl.
Traumaticini, ... f ℥ j.—M.
S.—Apply with a camel's hair pencil.

This combination affords the best results in psoriasis. After thorough removal of the scales, it should be painted directly on the patches, being careful not to put on the face, or about the genitals. As is well known, chrysarobin occasions considerable dermatitis, and its effects must be watched.

℞.—Quininæ sulphatis, . . . gr. x.
Spir. myrciæ, ... f ℥ iij.
Glycerinæ, ... f ℥ j.
Sodii cloridi, ... ℥ij.
Aquæ, ... q. s. ad f ℥ viij.—M.
S.—Local use.

There are hundreds of so-called hair tonics, containing more or less of these ingredients, but the one here given is one of the most satisfactory of its kind.

℞.—Acidi salicylici, ... ℥ ss.
Zinci oxidi,
Amyli, ... āā ℥ ij.
Vaselini, ... ℥ ij.—M.

The formula above constitutes the well-known Lassar's paste. It may be applied on strips of cloth, or in chronic scaly patches directly rubbed in with the finger. It is of value in many varieties of eczema and intertrigo.

℞.—Zinci oxidi, ... ℥j.
Glycerini,
Mucilag. acaciæ, . . . āā f ℥ ij.—M
S.—Apply with a brush.

In extensive patches of eczema this paste is very agreeable. If itching is severe, one per. cent. of carbolic acid may be added.—*St. Louis Polyclinic.*

ETIOLOGY OF DIPHTHERIA.

From a recent correspondence of the *Medical Register*, we clip the following:

The Etiology of Diphtheria was the subject of a paper read before the Cincinnati Academy of Medicine recently, by Dr. B. K. Ratchford, bacteriologist to the Medical College of Ohio. He stated as the object of his paper the discovery of the truth or falsity of the opinion that diphtheria is a local disease, and that the constitutional symptoms are produced by poisonous materials absorbed from the local lesion, and to study certain other points relating to the etiology of this disease. After a thorough discussion, he arrives at the conclusion that the constitutional symptoms of diphtheria, including the after paralysis, are produced either directly or indirectly by ptomaines.

In conclusion, the doctor summarized the following conclusions:

1. Diphtheria is a purely local disease. 2. It is caused by an external parasite. 3. This parasite is practically, if not strictly, a aërobic. 4. The constitutional symptoms are due to the absorption of poisonous materials, viz.: ptomaines from the local lesion. 5. The changes occurring in the blood and tissues, including the nerve lesions, are caused by direct or indirect action of ptomaines. 6. The disease has no latent stages, and second and third attacks are due to re-infection. 7. One attack, as a rule, gives at least temporary immunity. 8. After the limited period of immunity has expired, the previous attack may act as a predisposing cause to other attacks, if it has left the mucous membrane of the throat in an irritat

and inflamed condition. This is more likely to occur in scrofulous subjects. 9. Complications may occur from the entrance into the body of septic germs.

Upon these points he lays down the following rules of treatment:

1. Dissolve away the membrane, if possible, and irrigate thoroughly and frequently with an antiseptic solution, the local lesion, for the double purpose of washing away the poisonous alkaloids and retarding the growth of parasites. 2. In diphtheria of wounds, and in other parts where it is practicable, the thorough irrigation should be followed by a dressing which would exclude atmospheric air. This on account of the aërobic nature of the germ. 3. We should try to rid the system of the poisonous alkaloids by mild catharsis, free diuresis and diaphoresis, with remedies which do not have a depressing action on the heart. 4. We should seek to counteract the depressing effects of this poison on the heart and other tissues by abundant stimulation. 5. We should also seek to counteract its deteriorating influence on the blood by free exhibition of the great blood restorer—iron. 6. We should render the air of the sick room as nearly aseptic as possible, to prevent the entrance of adventitious germs. 7. Chronic glandular enlargement, and other disease remaining about the throat, should be cured before dismissal, else the patient warned against the future exposure to diphtheritic poison. 8. The patient should not be entirely dismissed from observation for two months, during which time he should receive tonics and good food. 9. A serious exacerbation of symptoms in any form of ulceration or catarrh of the stomach or intestines, occurring in a patient exposed to diphtheria, should lead us to suspect the disease in these parts and we should treat accordingly.—*Am. Med. Digest.*

The Use of Pessaries.—Dr. Wylie, Professor of Gynæcology, in the New York *Polyclinic*, gave a lecture and clinic on displacements of the uterus, on February 14. He considers anterior displacements of little importance; it is usually only in posterior malpositions that treatment is called for. This treatment, in his opinion, should never be by pessaries. In his hospital, for the past several years, he has known only one to be used. They simply support the uterus without reaching the cause of the displacement. Furthermore, they are dangerous, because of their liability to infect the patient. They abrade the mucous lining of the vagina, and, opening up the canal, allow free entrance of the air to the abrasion. He has often had women wearing the instruments for months and years without relief, whereas they have been quickly cured by curetting and the use of boroglyceride tampons. The tampons are a favorite method of treatment of many diseased conditions of the vagina and uterus with Professor Wylie, and he uses them continually to support the uterus in displacements. The tampons are made by cutting sheet borated cotton into strips, an inch and a half or two inches wide, rolling them up, with medium firmness, until they are of a desired diameter, preferably about half an inch or a little more. They are then wet with the following: R. Boroglyceride, f ℥ j; glycerine, f ℥ xiv. Mix and add a saturated solution of alum, containing ℥ iss of the salt.

Professor Wylie also thinks Alexander's operation of shortening the round ligaments rarely necessary, for, if the cause of the displacement is treated, the malposition can, in most cases, be cured.—*Med. and Surg. Rep.*

On Ehrlich's Diagnostic Sign of Enteric Fever.—Dr. Howard Taylor, House Physician to the London Hospital, says that the attention of Dr. Sansom, of London, was drawn to the subject of Ehrlich's test for enteric fever, whilst attending the Congress of American Physicians and Surgeons, at Washington last year. On his return to England he requested Dr. Taylor to investigate the test, which is as follows:

Ehrlich states that the urine of patients suffering from typhoid fever gives a reaction—with one of the aniline derivates—different from that of normal urine, or of the urine of patients suffering from other diseases. Ehrlich's tests are as follows: *A*, a saturated solution of sulphanilic acid in dilute (1 in 20) hydrochloric acid; *B*, a five per cent. solution of sodic nitrate in distilled water. (Both of these solutions must be fresh, especially the latter, which cannot be depended on for more than a week at the longest. When mixed, of course, a solution of sulphanilic acid containing free nitrous acid is produced, which is the actual test solution; but on account of the extreme instability of the latter the two solutions must be mixed fresh at each testing.) In using the test, about twenty-five parts of *A* are added to one part of *B*. Mix with this an equal bulk of urine to be examined, and render alkaline with strong ammonia.

With normal urine the change will only be a deepening of color into a sherry or vinegar-brown. In conditions of pyrexia other than typhoid fever the color also deepens, but when the test is applied to the urine of a patient suffering from enteric fever the color rapidly becomes red, the tint varying from ruby-red to that of a deep port-wine color. On shaking the test tube a froth is produced which has a delicate pink color which is very characteristic.

From the result of Dr. Taylor's experiments with this test, which are given at length in the *Lancet* of May 4th, 1889, he concludes that the absence of the reaction is practically a proof posi

tive that the case is not one of enterica (provided that the disease has lasted for six days or more). Its presence suggests—but does not prove—that the case is one of typhoid; the probability being greater the deeper the tint produced. And as the other diseases in which it occurs least rarely are not those which most closely resemble typhoid fever, but the reverse, the significance of these exceptions is very greatly diminished.—*Med. Prog.*

FOR CHRONIC CHILLS.—*Daniel's Texas Medical Journal* says that chronic chills, and that peculiar but very common condition of chronic malarial blood poisoning seen in swampy and other malarial sections, in which there is a "fever cake" or enlarged spleen, and a general dropsical tendency, there is no remedy, or combination of remedies, which has a better effect than that known throughout the South as Gadberry's Spleen Mixture. It is a solution of the oxy-sulphate of iron and potassa, and is made as follows:

℞.—Pulv. ferri sulph. - - - - - ℥ j.
Acidi nitrici, - - - - - f ℥ j.

Mix, and when reaction has ceased, add one ounce of some aromatic water, mint, or cinnamon; to this add quinine ℥ j, little by little, stirring constantly.

℞.—Potas. citratis *vel* nitratis, - - ℥ j.
Aquæ menth, pip. *vel* cinnam., ℥ vij.

Mix and dissolve and add slowly to the above, stirring constantly. Filter and wrap in blue or other dark paper, to exclude the light.

When properly made the mixture should be a perfectly clear, green fluid. The dose for an adult is a tablespoonful, three times a day, and in cases of long standing, it should be given every day for a month. On the days on which a chill is expected, the medicine should be given in anticipation, the same as quinine is given, and for children the dose should be proportioned to the age.

If old, dried sulphate of iron is used, the mixture is apt to be brown, and to deposit a sediment. If the sulphate is used in the natural state as found in the shops, and it is preferable, the mixture will be a bright green, and clear.

Care is necessary in adding the quinine to the acid solution of iron, to prevent its lumping; if added gradually and stirred with a grass rod it will dissolve like snow.

THE TREATMENT OF SEMINAL EMISSIONS.—The treatment of cases of nervousness from masturbation, or more properly nervousness about former masturbation, is commonly not satisfactory, but there is one measure which has proved so useful in several cases under my care, that I think it worth while to note it that it may be tried by others. It was, so far as I know, originally suggested by Professor John H. Brinton some years since, and I believe has proved of value in his hands. It consists in the application of a blister over the sacrum.

The measure is a somewhat severe one, but the patients are apt to have suffered many things of doctors, from advertising quacks up, and various treatments, mostly of a depressing or a merely palliative sort, with small results, and I find they offer little objection. What is more, the improvement is usually lasting. Of course, the use of the blister need not preclude other and additional treatment, hygienic and medicinal.

The cases are, roughly speaking, divisible into two classes. One has emissions, usually during sleep, without erection or with only an attempt at erection; in the other the semen is only voided during erection or upon some irritation, mental or physical. In the former sort, the treatment should be tonic. I like a mixture of dilute phosphoric acid and strychnia, which I generally give by the following formula:

℞.—Strychniæ, - - - - - - - gr. j.
Acidi phosphorici, - - dil. f ℥ ij.—M.
Sig.—25 drops in water after each meal.

In the latter kind, bromides, or, better, a mixture of hydrobromic acid and bromide of soda or of lithium, have done me good service.

Of course, the usual precautions must be taken that no old stricture be left to keep up an irritation, and hygienic directions given—a hard bed, not too heavy coverings, light suppers, little meat, a sponge bath in the mornings, the bowels kept free, and all causes of sexual excitement avoided. —J. K. Mitchell, in *Univ. Med. Mag.*, May, 1889.

A USEFUL FORMULA IN SKIN DISEASE.—I have been so successful in treating certain cases of skin diseases, that I thought I would write a communication on the subject. One case, that of a printer who was affected with a very bad eczema of a chronic nature, on both hands (dorsal aspect), presented himself. His hands were so sore and inflamed that he could not work at his trade for weeks at a stretch. Hypertrophy of the skin, large scabs with cracks between, from which issued pus and other discharges, were the conditions as near as I can describe. I prescribed the following mixture with instructions for him to apply three times a day, very thoroughly at night, at the same time keeping the parts protected by cloth gloves:

℞.—Ac. salicylic, - - - - ℥ ij.
Ac. boracic, - - - - - - - ℥ iss.
Biborate soda, - - - - - - ℥ ij.
Alcohol,
Glycerin, - - - āā q. s. ad ℥ iij.
—M. et ft. lotio

There was immediate improvement, and by sticking to the above treatment for three months,

his hands are now comptaraively well. I was myself affected with a very troublesome hyperidrosis, or hypertrophy of the sweat glands of the palms of both hands, and bromodrosis of both feet. I used the same remedy in a similar manner and I was surprised to see what good results followed. It is an excellent remedy in many skin affections, as acne, etc. It will pay any man, who has an obstinate case of skin disease of a non-specific nature to give it a trial. I generally incorporate aboot 10 drops of ol. bergamot with the formula to give it an agreeable smell.—F. M. Scott, in the *Med. Age.*

THE ETHER SPRAY IN STRANGULATED HERNIA.—In your last issue, Dr. Marett Tims describes a case in which he effected reduction of a strangulated hernia by aid of the ether spray. As he expresses uncertainty as to whether such application of the spray be novel and original, and invites correspondence upon the subject, I am led to communicate my little experience of the matter.

I first used the ether spray, as an adjunct to the taxis, seven months ago. The patient was an intractable old chronic maniac, on whom I had performed herniotomy twelve months previously. When the hernia returned and became strangulated, it occurred to me that the ether spray would effect all the good obtainable by the use of ice, and would be free from the disadvantages associated with the latter. The hernia was femoral and extremely tense; but after the spray had been applied to it a few minutes tenseness markedly diminished and reduction was soon accomplished. Twice within this month strangulation of the same rupture has occurred: the patient has been collapsed; vomiting, pain and distress have been urgent; and the tumor has been completley hard and irreducible. Each time, however, the spray has quickly brought the tumor into the reducible condition. In the few other cases of strangulated hernia in which I have used it I have found it equally effective. If the hernia be large, it is often necessary to reapply the spray several times during reduction—a fact probably due to the return of heat in the parts, with consequent expansion of the intestinal gases. It is to the rapid great contraction in volume of the gasses contained in the enterocele, caused by the deprivation of heat, that I attribute the main action of the ay. This result is produced without any of pernicious pressure upon the extruded viscus ch is inseparable fromthe use of ice-bag. My s have not included any in which much omen- or any solid organ formed the hernial con- —Ernest Birt, in *Lancet.*

TREATMENT OF OXALURIA.—Dr. Picard es that to combat the formation of oxalate of and to prevent the consequent loss of lime-salts and the formation of urinary calculi, it is necessary to avoid those foods which contain or may give rise to the formation of oxalates, such as sorrel, cresses, tomatoes, rhubarb, and the fruits rich in citric, tartaric and malic acids, especially apples and currants. Champagne and Moselle wine, and strong beer, are to be strictly abstained from. In their stead, cognac, whiskey and gin are to be preferred. Hard waters are to be avoided, but if used of necessity, should be boiled. The medicinal treatment should consist in the administration of potassium, sodium, alkaline phosphates, and food rich in phosphates, such as fish-roe, calf and mutton-brains. If there is acidity of the alimentary canal, carbonate of magnesia should be prescribed. In this case, also, may be advised nitrate of potash, chlorhydric acid, in doses of 20 drops two or three times a day, or a mixture of chlorhydric and nitrie acids.

℞. Acid hydrochloric,
Acid nitric, - - - āā ʒ iv.
Water, - - - - - ℥ iss.
Orange syrup, - - - - ʒ iv. M.

S. One tablespoonful in a glass of water before each meal.

Patient should eat moderately, avoid damp air and depressing influences. He should take active exercise in the open air, and such gymnastic exercises as will increase respiration and muscular development. He should take salt baths and sea voyages. All these tend to change oxalic into carbonic acid through the absorption of a greater quantity of oxygen. He should drink freely of warm aromatic drinks and of milk and avoid sugar. Infusions of calumba and hops are good, as are also Vals and Vichy waters. Patients should retire and rise early.—*Le Practicien*

THE CANADA LANCET argues that a six-months' session for the Medical College is long enough, and we heartily agree with our contemporary. There is a limit to all things human; and despite the advances of the age, the human mind has a limit to its receptivity. A season of activity must be followed by one of repose, as the night follows the day. The muscles of the prize fighter cannot be kept in condition very long, or the state known as "over-trained," supervenes. Even the base-ball or cricket player becomes stale after a long season, and his cunning fails him; the ball eludes his weakened grasp. After six months imbibition of knowledge from a dozen different sources, the medical student reaches a pitiable state of supersaturation; and it is more than likely that further effort would result in his forgetting what he had already learned. Better add another year to the course and grade the studies, and keep the term at six months.—*Times and Reg.*

"TAKE YOUR MEDICINE."—As is only too well known, children and infants frequently refuse to take medicines, however palatable they may have been made. A great deal of trouble may be saved, I find, by fixing the cheeks firmly with the finger and thumb of the left hand, whilst the spoon is inserted with the right. By this method, which I first observed practised by a young married lady recently, the first essential in the act of deglutition is provided for, namely, a fixed point for the pharyngeal muscles. Ordinarily this provision is effected by closing the mouth, and there cannot, I think, be any doubt that the prevention of the natural process by the presence of the spoon leads in great part to the struggle to avoid taking medicine. When the approximation of the lips is prevented by the firm forward pressure of the finger and thumb, medicine may be poured into the pharynx without fear of it being spat out, and the most refractory child will, as a rule, discreetly swallow it. The practice of nipping the nose, should, I am sure, be strongly condemned, because of the risk incurred of forcing the medicine along the Eustachian tube.—Dr. Illingworth in *Br. Med. Jour.*

NAPIER (A.) ON THE TREATMENT OF ALOPECIA AREATA.—The patient, a young woman of twenty-six years, had suffered from the disease for sixteen years. For four years there was not a single hair on the head, and the eyelashes and eyebrows had been absent for ten years. The treatment consisted of tonics (chiefly iron and strychnine) internally, while locally a stimulating lotion, consisting of equal parts of carbolic acid, rectified spirit, glycerine and water, was rubbed in twice daily. Within the last few months nitrate of pilocarpine ($\frac{1}{4}$ grain in pill at bedtime) has been given, with good effect. The hair is now growing fairly well over nearly the whole head; it is glossy, strong, and deeply pigmented, and remains in when it does grow. The eyebrows and eyelashes have re-appeared.—*Glasgow Med. Jour.*, April, 1889.

AN Exchange gives the following:—The Doctor's daughter: "I declare you're a dreadful fanatic, Mrs. McCizzom. I do believe you think nobody will be saved but you and your minister."

Old lady: "Aweel, my dear; ah whiles hae my doots about the meenister!"

IT is said that (*Ex.*) persons rendered insensible by the inhalation of illuminating gas, may be quickly restored by the administration of a few drops of acetic ether on a lump of sugar.

DEATH FROM ETHER.—A patient named Fero died (*Times and Reg.*), on the operating table at Philadelphia City Hospital, from the effects of ether. The operation was for hip-joint dis-

Reports of Societies.

THE ONTARIO MEDICAL ASSOCIATION.

The Ninth Annual Meeting of this body was held, June 5th and 6th, in the theatre of the Normal School, Toronto, the President, Dr. Henderson, of Kingston, in the chair; Dr. D. J. Gibb Wishart, Secretary. The attendance was the largest of any previous meeting, quite a number of American delegates and representatives being present, as also gentlemen from the sister province of Quebec.

The routine business being finished, Drs. Gibson, of Belleville, and Campbell, of Seaforth, read reports of some interesting cases, which was followed by the usual amount of discussion. In the afternoon, the President's address was the first on the programme. It was listened to with marked attention and interest. It appears in another place of this issue.

The discussion in Surgery was opened by Dr. W. T. Aikins, of Toronto, who took as a subject the "General Management of the Patient and Sick Room in Surgical Cases."

The Dr. dealt with the question of pure air in the sick room, and maintained that this branch of treatment was frequently neglected. He believed that the men and women of Ontario were not possessed of the same quality of bone and sinew, or for that part of height, as their forefathers of the old lands. The speaker laid a great deal of stress upon the filtration of air for the sick room especially in cities. He recommended the placing in the window of the sick room of two sheets of mosquito netting with cotton batting between. In cases of consumption he had seen great benefits result from the use of filtered air. Pure air as the greatest single remedy for consumption he thoroughly believed in.

The discussion was continued by Drs. Cameron and Britton, of Toronto, and Ruttan, of Napanee.

Dr. Roswell Park, of Buffalo then read a paper on the "Radical Cure of Hernia," which also appears in this number. The paper was well received and induced much profitable discussion. At four p m. the Association divided into sections when Dr. Holmes, of Chatham took the chair in the

MEDICAL SECTION.

Here Dr. Smith, of Seaforth, read a very interesting and thoughtful paper on "Reflex Nervous Phenomena due to Preputial Contractions." The Dr. related the history of three cases, bearing on his ideas on this subject, which must be looked upon as orthodox and worthy of most careful attention, at the hands of the profession. He referred to Mr. Owen's teaching, that a small preputial or urethral orifice are perhaps the most common causes of hernia in children.

Dr. McKinnon's paper on "Venesection in Pr

peral Eclampsia," followed. His views are pronounced on this question. He does not put much faith in nervine sedatives, or morphine, but thinks the inhalation of chloroform of value. He places venesection in the first place, to be aided by chloroform, purgatives, and morphia. The Dr. has had seven cases in his own practice, none fatal. Venesection was employed in six of them. Dr. Richardson, of Toronto, was fully in accord with the reader. Dr. Holmes, of Chatham, did not resort to venesection in anæmic subjects; he believed in the use of diaphoretics in addition to the remedies referred to by the other speakers.

Dr. H. H. Wright, of Toronto, read an excellent paper on "The Prevention of Puerperal Septicæmia." He holds that, with a proper understanding of the subject, sepsis in the lying-in chamber should be a rare event. He believes that the avenue to complete prevention of septicæmia is in absolute cleanliness on the part of the accoucheur. He does not hold to the necessity of antiseptics as such, believing that hot water, soap, plenty of washing, etc., will completely sterilize the hands. The patient should be thoroughly cleansed as to bleeding surfaces, proper dressings applied and much attention paid to the hygiene of the surroundings, as drainage, plumbing, etc. He objects to vaginal and intra-uterine douches, "because they are unpleasant for the patients, because they interfere with the physiological rest which the torn and bruised parts should have, because septic matter or air may be introduced and brought in contact with rents in the cervix, vagina, or vulva, and finally because they are unnecessary."

He believes that the introduction of the fingers into the vagina after labor is entirely uncalled for in the vast majority of cases, the placenta being easily expressed by external manipulation. At this stage septic matter is most readily up-taken by the open vessels and the abraded surfaces.

Dr. Temple considers that there would be very few cases of puerperal septicæmia if the accoucheur took all necessary precautions. He also objects to the routine use of douches. In his own practice he never used an antiseptic pad, but simply a clean diaper. In his opinion the majority of septicæmic cases are due to absorption of septic matter by rents in the passages.

Dr. Gunn, of Clinton, followed with the paper titled, "Case of Schleroderma." The patient s exhibited.

SURGICAL SECTION.

)r. Howitt, of Guelph, took the chair, and Dr. tchell, of Enniskillen, read a paper on "Early eration in Cases of Obscure Abdominal Dise." The paper was discussed by Drs. Mann, of ffalo; Oldright, of Toronto, and Groves, of gus.

r. Moore, of Brockville, opened the discussion phthalmology by a paper on "Glaucoma," which we hope to give our readers in a subsequent issue. In the discussion, Drs. Burnham, Palmer and Reeve, of Toronto, took part.

EVENING SESSION.

Dr. Skene, Brooklyn, N.Y., read a paper on "Intraligamentous Ovarian Cystoma."

The Hon. G. W. Ross, Minister of Education, entered the hall after the reading of the paper. He was welcomed by the President. In a short address he referred to some matters of general interest to the profession.

In the discussion on Dr. Skene's paper, Drs. Temple, of Toronto, and Mann, of Buffalo, took part.

In Medicine, the discussion was opened by Dr. Sheard, of Toronto, by a paper on "The Prognostic Significance of Moderate Cardiac Hypertrophy and Dilatation." His paper created quite a discussion, those taking part being Dr. McPhedran, Toronto, and Dr. Bruce Smith, Seaforth.

Thursday, June 7th, Morning Session.

MEDICAL SECTION.

Dr. Holmes in the chair.

Dr. Price Brown, of Toronto, read a paper on "The Treatment of Phthisis Pulmonalis." He believes that much may be done to ameliorate the condition of the patient in all cases by inhalations of compressed air, and of air laden with various resinous substances in vapor. In the discussion which followed, Dr. Stewart, of Montreal, Dr. McKay, and Dr. Holmes took part.

Dr. Smith, of Orangeville, read a scientific and interesting paper on the "Pathological Relations of Spleen and Bone Medulla." It was unfortunate that none of those present were in a position to discuss the questions brought forward by the lecturer.

Dr. Anglin, of Kingston, read a paper on "Typhoid with Perforation of the Bowel."

SURGICAL SECTION.

Dr. Powell, Toronto, gave a description of a button-sature, being his own invention.

Dr. E. E. King, of Toronto, read a paper on the "Use of the Cystoscope in diagnosing Bladder disease." It was listened to with much attention. The Dr. illustrated his remarks by a demonstration of the powers of the instrument. Drs. Tremain and Park, of Buffalo, took part in the discussion which followed.

Dr. Dupuis' paper on "Periostitis Albuminosa of Ollier," was read by title, the Dr. not being present.

Dr. J. E. White's paper on "Recent Modes of Treating Fractures of the Wrist-joint," was discussed at length.

Dr. Griffin's paper on "Laceration of the Perineum," was read by Dr. Allan Baines, owing to

the illness of the writer. In the discussion which followed, Drs. Barrick and Wright, of Toronto, took part.

AFTERNOON SESSION.

MEDICAL SECTION.

Dr. Holmes in the chair.

Papers were read by Dr. Sweetnam, Toronto, on "The Probable Future of Electricity in Gynæcology"; by Dr. McPhedran, Toronto, on "Abortive Forms of Typhoid"; by Dr. Ryerson, Toronto, on "Some Forms of Headache"; by Dr. Dickson, "A Plea for Electricity in Medicine"; and by Dr. McKinnon, Alvinston, on "Alcoholic Stimulents as Regards Quality."

A feature of more than ordinary interest was a short address by Dr. Workman, one of the oldest members of the profession in Ontario, occasioned by Dr. McPhedran's paper on typhoid. The old gentleman went back over forty years to the first cases of typhoid that he had experienced in the Province.

SURGICAL SECTION.

Papers were read by Dr. Newman, New York, on "Electrolysis in Surgery and Gynæcology"; by Dr. Howitt, Guelph, on "Miscellaneous Laparotomies"; by Dr. Groves, Fergus, on "A Case of Vaginal Hysterectomy, with Abdominal Surgery." "Some Practical Points in Gynæcology and Abdominal Surgery," by Dr. Halford Walker, and a paper on "Cholecystotomy," by Dr. McPhatter, Cleveland, O., completed the proceedings.

EVENING SESSION.

The proceedings were opened by a paper by Dr. Thorburn, of Toronto, on the "Uses and Abuses of Antipyretics." Drs. Wishart and Davison, of Toronto, followed in the discussion. Dr. Workman, speaking on the same subject said, he, as one of the old fogies, wished to hear the opinion of members on the use of whiskey in fever cases. He wanted the opinions without prejudice to the Scott Act. Dr. Geikie said he had himself, while believing that whiskey was of little use in many cases, used it often as an antipyretic. Dr. Oldwright believed with a speaker at the morning session, that a great many men now in their graves would not have been, if they had stuck to cold water. Dr. Cameron agreed in the conclusion that cold water was one of the most effective of antipyretics. Drs. Richardson, Thorburn, Oldright and Sullivan also took part in the discussion, while from the gallery a number of students looked down and listened to their seniors.

The Treasurer's statement showed an income of $625.81, and a balance of $156.74. The number of members who had registered was 217. It was agreed, on motion of Hon. Dr. Sullivan, to donate $100 of the surplus to the Ontario Medical Library Association.

Votes of thanks to the Secretary, the Treasurer, the Minister of Education, and other gentlemen who had aided the Association, were passed. The last part of the proceedings was the installation of the new officers elected at the previous session. The Convention adjourned finally at 10.45.

ELECTION OF OFFICERS.

The report of the Nomination Committee, which was adopted by the Association, resulted in the election of these officers:

President—Dr. J. Algernon Temple.

Vice-Presidents—1st, Dr. Lundy, Preston; 2nd, Dr. G. Shaw, Hamilton; 3rd, Dr. K. N. Fenwick, Kingston; 4th, Dr. Hanley, Waubaushene.

General Secretary—Dr. D. J. G. Wishart, Toronto.

Treasurer—Dr. E. J. Barrick, Toronto.

Assistant Secretary—Dr. W. P. Caven, Toronto.

Committee of Credentials—Drs. W. H. B. Aikins and J. L. Davison, for three years' service; Drs. B. Spencer and Anglin, for two years, and Drs. Holmes, Chatham, and Smith, Orangeville, for one year's service.

Public Health Committee—Drs. T. S. Covernton and P. H. Bryce, for three years; Drs. A. Rice, Woodstock, and Kitchen, for two years, and Drs. Bell, of Mestin, and Greer, Coldsprings, for one year's service.

Legislation—Drs. Harrison and Bowlby, three years; W. T. Aikins. W. B. Geikie, two years; Aylesworth and T. R. Eccles, for one year.

Publication—Drs. A. H. Wright and C. Sheard, three years; W. P. Caven and W. A. Powell, two years; and George Peters and George Acheson, for one year.

By-Laws—Dr. Henderson, Kingston, R. A. Reeve, for three years; Price Brown and Mitchell, Enniskillen, for two years; Gibson, Belleville, and Gunn, of Clinton, for one year's service.

Ethics—Drs. Moore, Brockville, McDonagh, Toronto, for three years; Burnham, Toronto, and Tucker, Orono, for two years; and Arkman, Collingwood, and McKinnon, Guelph, for one year.

ONTARIO MEDICAL COUNCIL.

Owing to the pressure upon our space this month we have been unable to insert a report of the proceedings of the Council. The more important transactions of that body are, however, noticed in our Editorial columns. Following is a list of the officers for the current year:

President—Dr. Cranston, Arnprior.
Vice-President—Dr. Crawford.
Treasurer—Dr. W. T. Aikins.
Solicitor—B B. Osler.
Reigstrar—Dr. R. A. Pyne.

STANDING COMMITTEES.

Registration Committee—Drs. Rosebrugh (Chairman), Bergin, Campbell, Fenwick, Henry, Orr, Russell.

Rules and Regulations—Drs. Day (Chairman), Campbell, Fowler, Orr, Williams.

Finance—Drs. Philip (Chairman), Henderson, Wright Russelll, Ruttan, Vernon.

Printing—Drs. Buchan (Chairman), Harris, Wrigh McArthur, Moore, Vernon.

Education—Drs. Williams (Chairman), Bergi Buchan, Bray, Day, Henry, Burns, Ruttan, Fenwic Fowler, Grant, Geikie, Harris, Husband, Logan, Russe Wright.

Executive—Drs. Burns (Chairman), Campbell, Crar ton.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address,* DR. J. L. DAVISON, 12 Charles St., Toronto.

☞ *Advertisements inserted on the most liberal terms. All Letters and Remittances to be addressed to* DR. C. SHEARD, 320 Jarvis St., Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

TORONTO, JULY, 1889.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

THE MEDICAL COUNCIL

The late meeting of the Ontario Medical Council was characterized by the accomplishment of much useful work. The members were unusually constant in their attendance, and the week's work passed off pleasantly to all concerned. They were all present to hear the address of the retiring president, Dr. J. H. Burns, of Toronto. We hope to publish it in full in a subsequent issue.

One, and indeed the only change made in the curriculum, is that there is in future to be but one paper in Chemistry, which may include both the practical and theoretical departments of this subject. There will be only one oral in the same subject, and it will be practical in its nature. Regarding matriculation, the Registrar of the Council was directed to endeavor to make such arrangements with the Educational Department, that hereafter, as any candidate for the second-class non-professional examination with Latin, who has the study of medicine in view, may not be compelled to take the third-class non-professional examination, previous to his taking the second.

s is required under the present regulations, it seems to us a very vexatious and useless , when applied to students who wish to maulate in medicine, regardless of the teaching ession altogether. We understand that the ıcational authorities have stated that this could lily be done. There is every reason to believe, -fore, that the regulations relating to second-class teachers will be so altered as to admit of this relief to matriculants in medicine.

We are glad to learn that a summer session of ten weeks' duration has been made compulsory. It will, as we have previously pointed out, be valuable in keeping students engaged in useful, practical work, and will relieve, to a considerable extent, the tension of the final students' work during their winter sessions. We have no doubt that the time is not far distant when two summer sessions will be required, but the Council has certainly acted wisely in hastening slowly in this much needed reform. It is, we think, much preferable to lengthening the session to nine months, a scheme which seems utterly impracticable to the majority of lecturers in medical schools.

Another change is the addition of a course of not less than fifty lecture-demonstrations in medical and surgical anatomy, which is also compulsory. This subject has been, for some reason, the *bête noir* of the final students for a few years past. The present course must be taken in the final years, and will doubtless be of great aid in preparing students for the Council examinations in these most important subjects.

It has been decided that in future two examinations shall be held yearly, one in the spring and one in the fall. This, we think, is only right. The standard of fifty per cent. should be rigidly adhered to, for if a candidate be allowed to pass on forty-nine per cent., it will be a hardship to one who gets, say ,forty-eight per cent., if he be not allowed a pass, and so on. Still, a year is too long to refer a plucked candidate who has fallen below the required standard by only a few marks, and we think that the holding of semi-annual examinations must prove satisfactory to all concerned. The Registrar, in writing to the rejected candidates, shall state only the subject in which they failed, but not the marks obtained. This will, no doubt, save a great deal of heart-burning, and also trouble to examiners and the Registrar.

The question of British and Colonial Registration was dealt with at some length, but it stands *in statu quo*. We have referred to this question so frequently in the past that no further notice is now necessary.

It will be gratifying to the profession to know that the new Medical Act is to be enforced. The Council has directed the Discipline Committee to

investigate charges made against several registered practitioners in Ontario.

The list of officers will be found on another page of this issue.

THE ONTARIO MEDICAL ASSOCIATION.

The meeting of this body on the 5th and 6th ult. was without doubt the most interesting and successful that has yet been held. The numbers in attendance—217—attest the wide-spread influence the Society is now exerting. A feature of the meeting was the interest taken in the very excellent papers read and the instructive discussions thereon, the latter being, we think, a measure of the progress medical and surgical knowledge is making in Ontario. The President's address which we give *in extenso* in this number, was a carefully prepared, thoughtful exposition of some of the most interesting points pertaining to the duties and interests of the profession of to-day. It may be said indeed that Dr. Henderson made an excellent officer, the success of the meeting being largely due to the excellent organization displayed, for which he as President, and Dr. Wishart as Secretary, deserve the warmest thanks of every member of the Association.

The division into Medical and Surgical sections enabled a great amount of work to be done; the only drawback being that many interesting papers were being read and discussed synchronously, a drawback which, however, cannot be avoided owing to the non-ubiquitous nature of even medical men. Discussion on ethics, also on subjects generally outside of actual professional work, was limited, every one seeming to have been in good humor. The presence of several American gentlemen of reputation in the ranks of the profession, added greatly to the interest of the meeting. The Association always gladly welcomes these noted strangers, we can hardly call them foreigners; the masonry of medical science making all who come under its palladium brothers, in a scientific sense. It is a pity that more of the said brotherly feelings should not always be shown by practitioners of the art, who happen to live in the same locality, and whose financial interests sometimes clash.

Dr. Powell's bell was an excellent reminder to some, who, in their zeal, forgot that ten minutes was all the time possible to be allowed for any one member to discuss a given subject. The experiment is worthy of further trial.

We would like to urge upon our readers who are not yet members of the Association, the advantgages to be gained by such meetings as this one. We noted the subject in an editorial of a few months ago, and need not recapitulate. Suffice it to say that not only is science advanced, but the interest of the profession as a whole, and of each individual member of it are well attended to by such means. The officers elected were such as to meet with the general approval of the Association. The highest honor, that of the presidency, was very fittingly bestowed upon Dr. J. A. Temple, of Toronto. This choice is a matter of congratulation to the Association. Dr. Temple is perhaps as widely known and generally respected as any man in the profession in Canada, and we are sure will with his accustomed zeal and energy make an efficient officer, under whom the best interest of the Association will be advanced.

DIETERY OF CHILDREN DURING THE HOT SEASON.

The annually recurrent heated term, so dangerous to the very young, is again upon us. Although the temperature of the past month did not reach its average altitude, yet it is to be feared the present month may not pass without its usual exorbitant demands on the health and lives of our little ones, and that many homes may be desolated by summer diarrhœa. Therefore, although we may have nothing new to offer, we may refresh the memories of many by calling their attention to the supreme importance of regimen, especially as to diet, in this trouble. We no longer regard the malady as inflammatory in its origin, to be treated by antiphlogistics; nor as the name indicates, wholly an excessive secretion, to be restrained by astringents. Less medication, and more hygiene, less drugs, and more judicious diet have proved more successful. Experience had taught us the value of sanitary environment prior to the knowledge of the microbe and its deleterious influence as also the necessity of scrupulous care in the diet The insanitary conditions such as overcrowding atmospheric impurity, with elevated temperature are predisposing causes which cannot always b obviated; and when there are added to these, in

pure milk and water, often injudiciously administered, we cannot wonder that the omnipresent microbe invades and frequently destroys the young and delicate. But we claim that improper diet is the chief, direct or immediate cause of diarrhœa. The natural processes failing to digest the food taken, attempt to remove it, but either fail to do so under unfavorable circumstances, or in accomplishing it depress the vital powers, and the micro-organisms so excessively prevalent during hot seasons, overwhelm the weakened natural resistence to their baneful influence.

If the child be nursing when attacked, it is unwise to make any change unless there be something clearly wrong with the maternal supply. All experienced physicians know how much more amenable to remedies nursing children are than those artificially fed. Nor are they nearly so liable to the disease, for the microbe can seldom obtain admission to aggravate the irritation caused by indigestion or otherwise, especially if water or other fluid taken be sterilized by thorough boiling. But if the child be deprived of its natural supply from any cause, then great caution must be used to prevent the admission of impure milk or other improper nourishment. We need not refer to the well-known necessity of proper dilution with water, and addition of cream and sugar to cows' milk for children, which, after all, is nearly always the basis of prepared foods; but it may not be so commonly known that cows' milk is acid, while human milk is alkaline, therefore a little lime-water should always be added. For children over six months old, a little dextrine, in the form of arrow-root, or the old flour ball made by boiling for hours in a small bag some wheaten flour, drying and grating it. Another important matter is to limit the quantity. Much harm is done by over loading the irritable and weakened stomach. If the patient appear to crave more, it is water it needs, and this thoroughly boiled, with a little stimulant added, may be given *ad lib.* If the above milk diet fail, sometimes animal broths succeed, but this is an exception to the rule. But when indigestion follows an attack of diarrhœa, and the child is suffering from in-nutrition subsequent to the primary attack, nothing in our hands has succeeded so well as raw beef-steak finely minced and properly seasoned.

We are aware that boiling milk in the ordinary manner will not thoroughly sterilize it, as it requires a temperature of not less than 266° F., which can only be attained under pressure. But for practical purposes thorough boiling in the ordinary manner for not less than two hours, will destroy many micro-organisms, and suppress the activity of all of them in milk or water. Boiled milk is also preferable to raw, as it produces a much finer coagulum and is much more easily digested. In very feeble stomachs it is often necessary to supply partly predigested foods prepared from sterilized milk with proper proportions of dextrine, sugar of milk and a little salt. Want of space prevents further discussion of this fruitful subject, but to conclude briefly, permit us to reiterate the necessity of absolute cleanliness everywhere, so that pure air may be inhaled, pure nourishment absorbed, and proper attention to the skin given. In this way only can the universal microbe be suppressed. Let the destruction of these organisms be our first consideration not only in actual disease, but prior to its advent, as prevention is better than cure. This having been accomplished as far as possible, an equable temperature maintained with judicious medication, we may expect to safely carry over the hot season most of our young patients, or at least a larger percentage than were saved in former days. But "eternal vigilance is the price of success."

THE MEDICAL COUNCIL.

List of successful final candidates at the recent examination by the Medical Council of Ontario:

W. J. Armstrong, R. K. Anderson, H. W. Armstrong, W. E. Almas, F. J. Bradd, J. Brown, A. E. Bateson, W. W. Birdsall, A. E. Bolton, J. J. Broad, J. E. Bowman, H. Becker, T. A. Beaman, E. Bull, G. M. Bowman, P. Brown, G. B. Carbert, G. K. Crossthwaite, J. Campbell, J. H. Collins, J. T. Campbell, J. Carruthers, G. Chambers, C. P. Clark, H. Chapple, J. Crawford, W. H. Clapp, Miss Jennie S. Carson, J. A. Creasor, R. C. Channonhouse, R. M. Cooper, C. A. Cline, H. N. Coutlee, M. C. Dewar, W. C. David, W. A. Dixon, G. A. Dickenson, John Duff, W. J. Earley, G. F. Emery, A. R. Elliott, W. Egbert, A. T. Emerson, H. C. S. Elliott, J. M. Fraser, I. A Fitzgerald, S. M. Fraser, A. E. Garrow, J. B. Gamble, F. E. Godfrey, W. C. Gilchrist, J. A. Greenlaw, M. E. Gilrie, H. Grundy, D. Henderson, A. H. Holliday, J. S. Hart, A. F. Hilliker, W. C. Harding, L. J. Hickson, R. N.

Honner, J. Holdcroft, F. B. Harkness, C. H. Hamilton, J. A. Ivey, W. T. Irwin, W. Kerr, O. L. Kilborn, H. O. Lanfear, W. C. Little, H. J. Miklejohn, W. J. Milne, A. J. McAuley, W. J. Maxwell, E. Meek, T. J. Moher, J. T. McKillop, I. P. McCulloch, T. J. McNalley, D. McKay, J. R. McCabe, J. Y McLachlin, J. M. McFarlane, C. McLachlin, D. H. McIntosh, Geo. McDonald, T. C. McRitchie, Miss Isabella McConville, W. W. Nasmyth, H. S. Northmore, W. S. Philip, J. A. Patterson, R. H. Palmer, T. C. Patterson, G. S. Rennie, C. J. Reynolds, S. T. Rutherford, D. A. Rose, J. A. Rose, W. H. Rankin, A. A. Smith, A. Stewart, W. A. Sangster, G. Silverthorn, A. Y. Scott, E. T. Snyder, H. A. Stewart, R. N. Topp, H. A. Turner, J. L. Turnbull, R. A. Westley, H. Wallwin, H. P. Wilkins, J. A Wylie, A. J. Wilson, A. E. Wills, W. H. Wilson, W. M. Wright, J. Webster, H. T. H. Williams, S. N. Young, H. A. Yeomans.

SUSPENSION TREATMENT OF LOCOMOTOR ATAXY.

This treatment for disease of the spinal cord, having taken such a firm hold of the minds of the medical profession, it may not be amiss to call attention to some dangers attending its use. We see that Dr. Vincent, of the Clifton Springs Sanitarium, was found dead a few days ago, his body hanging from the tripod. It would seem he had been experimenting with the contrivance, probably with a view to noting on his own person the effects of suspension, and that by some inadvertence he lost control of the rope. The chin strap slipped over his mouth and nose and death by suffocation was the result. Another case, reported in *The World*, was that of a young lady, who is supposed to have fainted while suspended, and to have been similarly suffocated. She was under the care of Dr. Sayre, and the accident happened a number of years ago. These accidents point to the necessity of always having at least an attendant, preferably a physician, present when the suspension is being carried out. The variety of accidents which might happen must be great, and if the good results attributed to the treatment in that dread disease, tabes dorsalis, prove lasting, it would be a great pity if they should be accompanied by a series of such accidents as we have referred to above.

NEW YORK POLYCLINIC.—The following new appointments have been made:

Dr. Thos. R. Pooley, Surgeon-in-Chief of the New Amsterdam Eye and Ear Hospital; Ophthalmic Surgeon to the Sheltering Arms; Consulting Ophthalmologist to St. Bartholomew's Hospital; Professor of Ophthalmology. Dr. B. Sachs, Consulting Neurologist to the Montifiore Home for Chronic Invalids; Professor of Neurology. Dr. L. Emmett Holt, Visiting Physician to the New York Infant Asylum; Consulting Physician to the Hospital for Ruptured and Crippled; Professor of Diseases of Children. Dr. August. Seibert, Physician to the Children's Department of the German Dispensary; Professor of Diseases of Children. Dr. H. Marion Sims, Gynæcologist to St. Elizabeth's Hospital. and New York Infant Asylum; Professor of Gynæcology. Dr. Wm. H. Fluhrer, Surgeon to Mt. Sinai and Bellevue Hospitals; Professor of Genito-Urinary Surgery.

The Polyclinic has increased its Hospital Facilities by the purchase of a large building immediately adjoining its original property, and after making the necessary changes will furnish and have it open by September 16th, when the regular session will commence.

BRITISH MEDICAL ASSOCIATION.—The fifty-seventh annual meeting of the British Medical Association will be held at Leeds, on Tuesday, Wednesday, Thursday and Friday, August 13th, 14th, 15th, and 16th, 1889. The President-elect is Mr. C. G. Wheelhouse, F.R.C.S., J.P., consulting surgeon to the Leeds General Infirmary. An address in Medicine will be delivered by J. Hugnlings Jackson, M.D, F.R.S.; an address in Surgery, by T. Pridgin Teale, M.B., F.R C.S., F.R.S.; and an address in Psychology by Sir J. Crichton Browne, M.D., LL.D., F.R.S.

CANADIAN MEDICAL ASSOCIATION.—This is to certify that the bearer ..... is a delegate to above and accompanied by ..... and are entitled to .....tickets at the Special Rates to Banff Hot Springs and Return, granted by the Canadian Pacific and Grand Trunk Railways.

.....*Gen. Sec.*

MONTREAL,.....1889.

Departure should be arranged so as to connect with train leaving Montreal or Toronto on the evening of 6th August. Delegates from west Kingston, going by way of Toronto, and from Kingston, Sharbot Lake and East *via* way

Montreal or Carleton Junction Tickets issued on these certificates will be good only for going trip between 5th and 13th August inclusive, by which latter date the journey to Banff must be completed.

Intending delegates should apply to Dr. James Bell, Sec., Montreal, stating whether accompanied or not, so that the above form may be filled in.

At present it would appear that the meeting will be largely attended by members of the profession from all points in Ontario.

TREATMENT OF HEADACHES. — Dr. E. Lloyd Jones (*London Practitioner*) has written an able paper on the diagnosis and treatment of headaches, accompanied by diminished or increased blood-pressure, and he sums up the treatment as follows: First, with regard to low-pressure headache. In acute cases, *e. g.*, the toxic headaches from alcohol and tobacco, exercise and food are patent remedies. Relief is obtained from cardiac stimulants such as the following:

℞ Spts. ammoniæ aromat. . . ʒss.
Spts. chloroformi . . . . ɱ. xx.
Aquam ad. . . . . ʒi.

Antipyrin in small doses (gr. iii.) is also useful.

In more chronic (recurrent) cases prolonged treatment by drugs is often necessary. In anæmic persons, iron is generally useful as an adjunct, but it is well often to give tr. digitalis with it in doses of ɱi. to iii. which will not slow the pulse.

If the patient is pallid, but the ears and lips are red, iron is of little service. In these cases, the tr. of digitalis ɱ i. to iii. is very efficacious, the bowels being kept open if necessary. These are the patients who have an excessive number of red cells, with an increased specific gravity of the blood; they are very prone to low-pressure headaches, and they are much relieved by rest and change.

In high-pressure headaches, the bowels must be kept open, but not purged. The nitrite of amyl, efully administered in a very dilute state, is y useful. Nitro-glycerine is even more useful, the dose can be more easily regulated, in recur- t as well as in acute cases. In anæmic girls, des improving their blood condition, nitro- erine should be given in doses of one six-hun- th of a minim twice a day, and more than six should not be ordered. In recurrent high-pressure headaches alkalies are most beneficial. When these occur in anæmic young women, iron should be given with them. Iron alone would increase the headache.

NESTLE'S MILK FOOD.—Among the various devices resorted to by the owners of proprietary articles to bring their goods into notice, we do not remember seeing anything more dignified or effective than the silent eloquence of the group of medals (see page 29) awarded to Henri Nestle, by the juries of the world in recognition of the superiority of Nestle's Milk Food as a diet for infants.

Thomas Leeming & Co. have won for themselves and the goods they handle the confidence of the medical profession and the chemists in Canada, by not attempting to run down competitors, but simply placing their goods before the profession, asking them to test their merits, and to continue to use or disuse, according to the result of the test.

It goes without saying, such a course as this can only be successfully adopted where the goods possess undoubted merit and are practically independent of the aid of printers' ink, which is the case with Nestle's Milk Food.

B. NAPHTHOL IN ENTERIC FEVER.—J. M. Clarke, M.B. (*London Pract.*), says that B. Naphthol given with antifebrin, to control the temperature, has a beneficial effect on typhoid fever. Forty grains given in twenty-four hours are sufficient to keep the intestinal contents aseptic, and thus hinder or prevent the development and multiplication of the various micro-organisms, and, therefore of the toxic products to which they give rise. He prefers it to any other drug for this purpose, owing to its solubility and its antiseptic properties. In some cases, it produces gastric disturbances, when it must be withheld for a time at least. He concludes: 1. That B. Naphthol is a safe and tolerably efficient agent to produce intestinal antisepsis. 2. That the duration of the disease is shortened, and the intensity of the symptoms directly arising from profound disturbance in the alimentary canal is lessened. 3. That complete convalescence is more speedily and satisfactorily attained; and that there is less risk of propagating the disease.

GLYCERINE INJECTIONS IN THE DIARRHŒA AND PROLAPSE OF CHILDREN.—Dr. George Rice (*London Practitioner*) reports seven cases in which persistent diarrhœa accompanied by great wasting, yielded to the injection into the rectum of two drachms of glycerine. In no case did he find it necessary to use more than three injections. Where prolapse was present it soon ceased to recur, as the little patient gained strength. Dr. Rice has also found, that where looseness of the bowels supervened in the course of other affections, such as pneumonia, the same happy results attended the injection of two drachms of glycerine. The injections cause neither pain nor discomfort. How glycerine proves so beneficial both in diarrhœa and constipation, Dr. Rice does not pretend to say, though he thinks it possible these troubles might spring from a common cause.

ANEMONE PULSATILLA IN GONORRHŒAL ORCHITIS.—Dr. Martel has employed anemone pulsatilla for some years in gonorrhœal orchitis with success. In 1885 and 1886 he reported a series of cases which he had cured with this agent, in doses of thirty drops of the tincture in twenty-four hours. The drug has the advantage of mitigating the pains and enabling the patient to walk. Dr. Bazy has taken up the experiments lately in the Hospital Midi, Paris, and communicates to the *Semaine Médicale*, an account of forty-eight cases so treated. In thirty-five cases recovery was complete, in ten there was marked improvement, in two recovery is uncertain, and in one case the drug had no effect. Bazy employs the drug (*Wiener Med. Presse*), in the following formula:

℞—Tinct. pulsatillæ . . . gtt xxx.
Syrupi . . . . . f ℥ iv. M.
Sig.—Dessertspoonful every two hours.

The remedy is willingly taken and well borne by the patients. Treatment must be continued until complete recovery occurs. The average time required for cure is eleven days.

ELECTRICITY IN RHEUMATISM AND ASCITES—Dr Walton, of Harvard University, (*Boston Med. and Surg. Jour.*) reports cases of chronic rheumatism that have been benefitted by faradism and galvanism, and M. Muret, after treating cases of chronic ascites by the application of the interrupted current to the abdominal walls, speaks in measured terms in favor of its occasional trial, as it has a special influence on diuresis and absorption.

TYPHOID FEVER.—Ziemsen thinks calomel has a decidedly beneficial effect on typhoid fever when given at the right time—that is within the first five days of the illness. He gives grs. vij ss., three times within two hours. He speaks very highly of antipyrine as an antipyretic, of which he administers 5 grammes in three divided, hourly doses, beginning at 6 p. m. He also recommends thalline and acetanilide for the same purpose, but objects to quinine.

ALUM IN OBSTINATE HÆMATURIA.—Dr. H. D. Didana, of Syracuse, N.Y., has cured (*Jour. Am. Med. Assoc.*) five cases of hæmaturia by administering 60 grains of alum in the course of twenty-four hours. He gave 20 grains in a goblet of water three times a day. In these large doses, and being well diluted, it did not constipate teh bowels. This treatment succeeded, after the failure of other remedies.

MENTHOL IN PURITIS LABII.—Dr. A. Duke, of Dublin, has been successful (*Brit. Med. Jour.*) in treating pruritis of the vulva by rubbing the surface over three or four times with the crystals of menthol. It produces some burning sensation at first, which is followed by a sense of coolness and relief which lasts for days in come cases.

TRINITY MEDICAL COLLEGE.—The teaching staff of this institution has been augmented by the appointment of the following gentlemen:—Dr. D. J. Gibb Wishart, assistant to Dr. Ryerson; Dr. E. A. Spilsbury, instructor in Rhinology and Laryngology; Dr. T. M. Hardie, the uses of the various appliances for diseases of the eye, ear, nose and throat. Drs. G. Gordon, J. A. Watson, F. Winnett and Eden Walker, assistants in practical anatomy.

LOCAL APPLICATION OF PEPSIN.—Dr. H. B. Douglas (*Revue de Thér. Méd.-chr.*), has found pepsin a most valuable application for indolent ulcers. It gives a healthy appearance to the sore, and promotes rapid healing. He uses it with lanolin in the following combination:

℞.—Pepsin . . . . . 48 grains.
Lanolin . . . . . ℥jv.—M.

CREASOTE IN DIABETES.—The *Lancet* says, two cases of diabetes have been treated with excellent results by Valentini, by means of creasote administered internally. In one case, four drops per diem were given at first, this quantity being afterwards increased to ten drops. Under this treatment the sugar disappeared, and did not return when the patient began to eat starchy food. The other patient was given six drops per diem, and did equally well.

SULPHONAL FOR NIGHT SWEATS.—This drug has been lately brought forward by Battrich, (*Thera. Monats.*) for night sweats. He gives cases, showing conclusively that its action is certain in most cases. His dose is about 7½ grains. He considers the effect of sulfonal as equal to that of atropin, but that it is wholly free from unfavorable side-effects. Moreover its effect is lasting, the sweats of the second night being much less profuse without sulfonal.

FOR HYSTERICAL VOMITING.—The following is said, Ewald, *Rév. de Thérap*, to be useful in the above :—

℞.—Hydrochlorate of morphia, . 3 grs.
Hydrochlorate of cocaine, . 5 grs.
Tincture of belladonna, . . 75 ɱl
Cherry-laurel water, . . . ʒvjss.—M.
SIG.—M. x–xv. each hour.

CAPILLARY PULSATION.—S. Lazarses-Barlow, of Cambridge, in a paper in the *London Pract.*, discusses the diagnostic value of capillary pulsation in heart disease. It is best observed on the mucous surface of the lip and beneath the nails. It is nearly always present in disease of the aortic semilunar valves, especially in regurgitant, and when present indicates that disease. This is important in doubtful cases, as by it we can tell whether to give digitalis or not.

LEAD POISONING.—It is sometimes very difficult to arrive at the source of the lead introduced into the system, even when its characteristic effects are ll marked. We notice in an exchange that two es which had defied detection for some time, re found to have been caused in one, by the endant biting off of tin foil, covering the stalks ›oquets at a florists, said tin foil containing at 8% of lead; in the other by drinking beer m bottles which had been cleaned with shot.

ONTARIO MEDICAL COUNCIL EXAMINATIONS.—We beg to call attention to the notice in our advertising columns, in reference to the examinations to be held at Toronto and Kingston in September next.

BROMIDE OF POTASSIUM IN OVARIAN ACNE.—Dr. A. Jamieson (*London Pract.*) draws attention to the coincidence between acne and ovarian irritation, and its attendant menorrhagia. He treats such cases with bromide of potassium, which relieves the ovarian trouble and cures the acne.

LEONARD, of Detroit, says *The Times and Reg.*, started the idea of publishing the names of the frauds who obtain credit from medical journals for advertising and then decline to pay their bills, with an impudent, "What are you going to do about it?" The law is a tedious, troublesome, and expensive remedy, and these men know it. But there is another method which they dread, and that is *publicity*. Drs. Leonard and Daniel have rendered medical journalism and honest advertisers a service by exposing these persons.

A. R. SMART, M.D. (*Toledo Med. and Surg. Rep.*), advocates ingi-puncture for internal hæmorrhoids. After forcibly dilating the sphincters, the base of each tumor is perforated one or more times by a wire of the size of a knitting needle, heated to a dull red. The patient is put to bed for from five to seven days after the operation, and on the second the bowels are opened with a gentle enema. In four or five weeks hardily a trace of the tumors will be found; no loss of tissue and subsequent contraction; only small indurations, which will subsequently disappear.

THE following is said to be (*Med. Summary*) an excellent cough syrup for children :

℞—Syrup. ipecac., ... f℥ij.
Syrup. scillæ, ... f℥ss.
Syrup. acaciæ,
Syrup. pruni Virginia, āā . . . f℥j. M.
SIG.—A teaspoonful as required.

TOBACCO HEART.—It is said (*People's Health Jour.*), that ten out of twenty candidates for cadetship at West Point were recently rejected on acconnt of tobacco heart brought on by cigarette smoking.

WE regret that the want of space prevents our publishing the address of the President of Ontario Medical Council. It will appear in our next issue.

DR. JAMES THIRD was awarded honors at the late meeting of the Council. He and Dr. Sutherland were the only candidates out of the whole number who succeeded in taking honors.

YOU may hive the stars in a nail keg, hang the ocean on a rail fence to dry, put the sky to sleep in a gourd, unbuckle the belly band of eternity and let the sun and moon out, but don't think you can escape the place that lies on the other side of Halifax if you don't pay for your paper.—*Theological Quarterly.*

Books and Pamphlets.

A CLINICAL ATLAS OF VENEREAL AND SKIN DISEASES, by Robert W. Taylor, M.A., M.D., Surgeon to the Department of Skin Disease of the New York Hospital, etc. Price $3.00 per part. Sold only by subscription. Specimen plate will be sent post paid, on receipt of ten cents in stamps to the Canadian Subscription Co., 647 Craig Street, Montreal.

Parts V. and VI. of this very estimable work are this month to hand. In part V. is taken up the tineæ, prurigo—impetigo and diseases of this class. Part VI. is devoted to Urticaria, Pemphigus, Tinea; Trychophytineæ Barbæ, Tinea Circinata Lupus and Ecthyma. We can only speak as before of the very excellent character of these numbers. The plates are certainly excellent, and give a good idea of the character of the affections. The text is an exhaustive exposition of all that is known upon these various affections, and the subject of treatment receives a much greater degree of attention than in other works.

ELEMENTS OF HISTORY, by E. Klein, M.D., F.R.S., Lecturer on General Anatomy and Physiology in the Medical School of St. Bartholomew's Hospital, London. 194 engravings. Philadelphia: Lea Brothers & Co.

The name of Dr. Klein is now so thoroughly and favorably known in connection with histology that any work bearing his name requires no commendation. The previous editions of the elements of histology have always been regarded among the best works upon the subject, and the present work is an improvement upon previous ones. The chapter upon striped muscle and the question of the terminations of nerves in connection with striped muscle has been extended. Several microphotographs have been introduced, illustrative of more recent observations. We recommend the work very highly; as a text or laboratory book it it cannot well be surpassed.

LECTURES ON THE ERRORS OF REFRACTION AND THEIR CORRECTION WITH GLASSES, by Francis Valk, M.D., Lecturer on the Diseases of the Eye, New York Post-graduate Medical School, etc., etc. New York and London: G. P. Putnam's Sons, "The Knickerbocker Press." Toronto: Williamson & Co., 5 King Street West.

This work comprises eleven lectures on errors of vision, and is a simple and complete method of diagnosis especially suited to the general practitioner. To the physician who is beginning the study of the subject, it will prove a very valuable treatise. The methods of testing for, and prescribing glasses, are here much simplified, and can be readily understood by anyone at all familiar with the subject. We can commend the work as a concise and very practical treatise.

FAGGE'S PRACTICE OF MEDICINE. Toronto: Virtue & Co.

We referred in a previous issue to this work as one of the best in existence on the subject. Of course the systems of medicine are more comprehensive, but as the production of one man's mind this effort stands, perhaps, unrivalled. The immense amount of erudition evidenced in its every chapter, its pleasing style, together with its sound scientific principles, make it a most valuable acquisition to every physician's library. It will be read not only with profit but with pleasure, the rough ways being made plain by the greatness of the genius of one of Britain's first physicians.

Births, Marriages and Deaths.

MEIKLE — MACMARTIN — At "Sunny Side River Rouge, on Wednesday, June 5th, 1889, the Rev. D. Paterson, T. D. Meikle, M.D., Mou Forest, son of the late Thomas Meikle, St. A drews, Que., to Ellie, sixth daughter of the l Martin, MacMartin, River Rouge, Quebec.

THE CANADA LANCET.

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Original Communications.

CORTICAL EPILEPSY—A CLINICAL LECTURE.

BY DAVID INGLIS, M.D.

Professor of Mental and Nervous Diseases, Detroit College of Medicine. Member American Neurolgical Association.

The patient whom you see before you presents, in a typical form, the group of symptoms which, in the past few years, has come to play a very important part in the study of the nervous system. I refer to the condition known as cortical or Jacksonian Epilepsy.

The patient is the wife of a man of an exceptionally irascible temperament, for within two weeks after the time of her marriage, she tells me that the honeymoon was interrupted by her husband beating her. This pastime seems to have been continued regularly, for fourteen years ago while she was just about to be delivered of a child, her husband knocked her down with a chair, which stunned her for some time. The child was born three days after. Again, at Christmas time, in 1886, she was struck on the left side of the head by a chair. You can see to-day the scar upon the temple which marks the place of the gash made by the blow. Such has been heen her domestic history; and both the blow on the left side of the head and the wearying effect of many years of such an existence, may well have acted together to ng about the symptoms to be noted later. ntinuing her personal history, I may tell you o that, married at the age of 17 years, she has seven children, of whom three are now living. , besides, had several miscarriages. Her labors easy, but she never was able to nurse her lren. One child died at the age of six weeks, was still-born. But while these facts hint at the possibility of specific taint, yet we can elicit no history of syphilis either in her person or in that of her husband. The family history throws no additional light upon the case, for the various members of the family seem to have been free from neurotic tendency with the single exception of her mother, who died of apoplexy at a fairly advanced age.

In person our patient is rather tall, not stout, but strong; naturally of a fresh, florid complexion, one can yet detect a certain anæmic pallor, especially in the color of the lips. Let me suggest to you, gentlemen, this point in regard to your examination of your patients. One of the most difficult, and yet one of the most essential things for you to learn is, that "seeing ye shall see." I well remember how, in early years, this Biblical phrase seemed to me a meaningless repetition. One naturally thinks that "seeing ye shall see" of course, but it is not "of course," quite the contrary, for we see continually a multitude of things which we yet do not perceive. Your clinical training ought to help you to learn to see. Now, the color of the skin depends not upon one fact alone but upon several—the thickness of the epidermis, the abundance and calibre of the capillaries, the color of the contained blood, and the color of the skin. You will see anæmic girls with thin clear skins and dilated capillaries, whose beautiful cheeks would deceive the very elect with their color. You must learn not to be deceived. So our patient is one of that class of people, commoner in Scotland and Ireland than in America, who have large and abundant capillaries near the surface. A little, even pale blood, makes a good deal of a show with such persons.

To return to our patient, we learn that on April 1st, 1887, about four months after the Christmas festivities, she had a miscarriage which caused an excessive, evidently dangerous hæmorrhage. Four weeks later she tells us that she suddenly lost the power of speech, as she puts it, "could think of things but couldn't say them." This condition lasted an hour and a-half, when she had a convulsion upon the right side of her body. At her next menstrual period, about a month later, the same phenomenon was repeated. The convulsions then began to recur with increasing frequency, coming about once in two weeks, but not in any regular connection with the menstrual

times. In December, 1888, she first came under my care, and when put upon treatment she managed to go along for five months without a convulsion. As to the convulsion itself she sometimes does not lose consciousness at all, more often experiences, just at the height of the seizure, a momentary unconsciousness. She is therefore able to describe her symptoms very intelligently. She feels first a curious sensation in the little finger of the right hand; this sensation or aura then spreads to the hand and is followed by a contraction of the fingers; then the hand, the forearm, the arm and neck, and right side of the face become involved; with this she loses her ability to speak. The attack soon passes off, but for a little time her speech is confused; she finds difficulty in getting hold of the right word. I should state that she has a pretty constant headache, which has lasted since May, 1887, and is always in her right temple. Also, in September, 1888, she noticed that she saw double, and thereabouts she noticed that she began to squint. The convergent strabismus of the right eye seems to be due to a paresis of the right abducens.

Such, gentlemen, is the clinical picture. Now let us see what it illustrates: It is not many years since the brain was regarded as a very mysterious, but single organ. To it were, indeed, attributed certain special intimate relations with thought, sensation, motion; but the first attempts to, in any way, analyze the functions of its complicated component parts, led off into the vagaries and futile fancies of phrenology. The absurdities of this system as has too often been the case with other and better systems entirely overshadowed the single germ of truth; so it happened that with the chaff we threw away the wheat. One solitary fact persisted. Broca had followed up the pathology of certain cases of loss of the power language, until he had established the fact that a small area just above the beginning of the fissure of Sylvius, the posterior part of the third or lower frontal convolution, just where the folds join in the beginning of that long ascending convolution which runs up in front of thefissure of Rolando, known as the ascending frontal, he had distinctly proven that there was a relationship between this area and an affection of speech now known as aphasia. He further recognized the fact that the lesion which gave rise to this affection was to be found on the left hemisphere. It is not necessary to-day to enter into a discussion of the discoveries which have since been made in regard to aphasia, which in themselves constitute a marvellous demonstration of the constitution of the cerebral mechanism, which show curious relationship within the brain, between the eye, the ear, the memory, the voice and the muscles used in gesticulation. It is enough that Broca's *fact* proved two things: first, the existence of what we now call a centre, a portion of the brain-substance set apart to be in distinct relationship with certain fixed parts of the body, to have a distinct relation with the performance of certain functions. The other fact was, that while the two halves of the brain look alike, yet it was evident that they do not *necessarily* act together.

Now, if one portion of brain matter were thus set apart to control one function, the further step was natural; it might well be that other functions might be found to depend upon other portions or centres, and the course of experimental and pathological study has gone on on these lines, making progress with constantly increasing rapidity until to-day, the doctrine of cerebral localization has reached an accuracy, a certainty, which so short a time ago as the year 1881, would have been deemed incredible. Not only have we widened our knowledge as regards the centres for speech, but a whole area has been mapped out under the name of the motor area, from which proceed the motor impulses to the entire body. The centres for the special senses afford still a subject for further discussion and investigation. Considering the manifold relationships between the special senses themselves and between them and all the finer mechanisms of the body, it is not surprising that many puzzling elements remain; yet it is safe to say that the principle of special centres applies equally to special and general sensation as well as motion. Again, while the problem of the relation of the mysterious phenomena which we call thought, consciousness, will, with the material substance of the body remain as inscrutable as ever, yet the principle of cerebral localization has made its way some few steps further into the darkness of the problem than was formerly possible. We know at least that the anterior convolutions of the cerebrum stand in close relationship with the processes which we designate as ment

or intellectual. In short, we are following out the almost necessary consequence of Broca's one fact, to wit.: that if one function be isolated in connection with one centre, then the others must be also.

Do not misunderstand this isolation of functional connection. The simile has been well used that the skull contains, like the abdomen, not one organ, but many; yet the fact should not be lost sight of that these many organs are related to each other in the most intimate manner. Consider the enormous mass of white matter which a transverse section of the brain just at the level of the corpus callosum shows; this white matter represents an infinite number of nerve fibres, of connecting paths; a moment's consideration will prove to you that only an insignificant portion of these paths can be for the purpose of conducting impulses either from the cerebrum to the body, or from the surfaces of the body to the cerebrum; for, note, what a little mass of white substance is revealed in a cross section of the medulla oblongata. Now, this mass of white substance called the centrum ovale represents the enormously complex means by which the various centres are related each to each other; so that while we rightly designate certain tracts as motor, others as sensory, or others as psychic or mental, yet each centre acts, influenced by some other, in a greater or less degree.

When the burned child dreads the fire, his mental condition called "dread," involves the centres of sensation which were once so pungently excited by contact with the stove, the centres for sight still retain the impression of red-hot iron, and the motor centres, I doubt not, retain enough of memory that they would on a second occasion withdraw the hand more rapidly than on the first occasion. All of these centres and more, are probably bound together when the child dreads the fire.

These preliminary thoughts upon cerebral localion lead, not unnaturally, to the subject in d, that of cortical (or, as it is often, and, as I ceive, unfortunately, called Jacksonian) Epiy. Various experiments had led up to a very ct localization of the centres for the arm, hand, nd face, and these experiments, necessarily med upon the lower animals, awaited further before the results could be held true of the human brain. The proofs were soon afforded by pathological experiment. Nature performs the experiment which we could not at first do. If along the fissure of Rolando, in man, there are motor centres like those proven to exist in the monkey or dog, then if these isolated areas are diseased, we should find corresponding evidences of alteration of function; or if destroyed, a corresponding loss of function. A mass of such evidence demonstrates the truth of the theory. The especial characteristic of cortical Jacksonian Epilepsy is this, that the convulsion is a partial or local convulsion. (The term epilepsy is here restricted to its original meaning of a motor disorder.) In some cases the convulsive movement is, and remains limited to a small group of muscles; the convulsions recur after the periodical manner of epilepsy; they are frequently preceded by a sensory discharge or aura, as in ordinary epilepsy, although the sensory discharge like the motor in such cases, tends to be of limited area; consciousness is frequently unimpaired, so that the patient is an interested and intelligent spectator of his own involuntary performance. Such is a typical limited cortical epilepsy; from this there are all grades in the extent of the symptoms up to a complete epileptic seizure with general convulsion, total unconsciousness and subsequent transient coma. It is both interesting and instructive to note how in some individuals the convulsions, may vary. For instance, a robust young woman under my care has at times, a convulsion in her leg only. If the discharge is more severe the convulsive movements of the leg are more pronounced, and the arm of the same side is involved; if still more severe, the opposite side of the body is involved; there seems always to be a proportiou between the intensity of the discharge and the extent of brain matter involved; but even in severe and widespread seizures it can be distinctly traced how the convulsion always begins in the same leg.

Here let me give you, in passing, this suggestion; you will constantly see in your medical journals, and will, I have no doubt, yourselves, publish curious, rare or unusual facts which come within your observation. It is quite right and helpful that these "curiosities" should be recorded, but always remember that it is not simply because a thing is strange, or, according to a favorite phrase, "unique," that it deserves publication,

but because the strange or uncommon phenomenon may throw a flood of light upon other related facts. You yourselves will miss the value of your curious fact unless you seek to discover its relation to other facts which may be of common occurrence and yet not fully understood.

Now, the observation of such a case of partial or local epilepsy, of how the various groups of muscles are, one after another, thrown into convulsion, has a value far greater than merely to record a curious fact.

In the first place, it throws light upon the nature of other and severer forms of epilepsy. When you witness an ordinary general epileptic convulsion, the general tumult is so great that it becomes quite impossible to unravel the tangled skein of symptoms, here are tonic and clonic convulsive movements, all the muscles of the body seem involved, we can tell nothing of the sensory conditions, for the patient becomes totally unconscious, in short, motion, sensation and intelligence are so profoundly involved that one cannot, by separating the symptoms, come at any fair explanation of the nature of the phenomenon. But in a case of limited epilepsy we see, in miniature, the process going on, the patient being conscious can give an account of the sensory condition, we can watch the character and progress of the convulsive movements and we see this fact first of all, that the motor disturbance is not set up by an effort of the will, but rather in spite of it. Here, to begin with, is a demonstration of the fact that motion may be set up independently of the mental control, a fact which bears out the theory of separate functions for separate parts of the brain.

Our patient with limited epilepsy, very commonly, but not always, has an aura, a sensory disturbance just before the convulsive movement, and usually felt by her as being in or near the member involved in the convulsion. If there be sensory as well as motor centres, then we should expect, from the common necessities of use, that the respective centres for the same part should be in habitual close connection. For instance, it is essential that the sensations affecting the right hand and arm should very readily bring about motion of the same parts, otherwise the sensations would fail frequently to protect the arm from injury or enable it to perform work required of it. This aura preceding the cortical convulsion, tends to prove the existence of precisely this arrangement.

One can imagine that the sensory centre for the arm being diseased and carrying on its functions irregularly, should send to the motor centre for the same arm a rush of orders all at once, setting the motor centre into confused activity and thus setting up a convulsion limited to the arm

That some cases of partial epilepsy are thus due to disorders, not so much of the motor centres in the first place, as of the sensory centres, seems probable from such facts as these. We know that in some cases, some local irritant at a distance from the brain, by sending in continual irritating impulses, can and does cause epilepsy. The proof is found in the cessation of the epileptic seizures upon the removal of the cause. Here let me again give you a practical point. You will frequently be warned to look out for these sources of reflex irritation. Naturally you will look for some spot distinctly painful, some irritation of which your patient *complains*, but if you stop here you will rarely find the point of reflex irritation. You will constantly miss your opportunities. The fact is, that the irritant does not usually cause a distinct pain, a *conscious* sensation, but that from some point a series of slight but steady irritant impulses are being constantly sent in which ultimately wears out the sensory centre.

Did you ever undertake to bring up a fairly good but active boy? Well, the boy may not be painfully bad, but he can wear you out. So, for instance, the process of dentition does not cause any very definite pain, but is a frequent cause of convulsions.

Another fact which goes to prove the sensory origin of some cases of cortical epilepsy, is to be found, in a fact occasionally noted that the patient can, at times, block off a seizure by a strong effort of the will. I have, for instance, a patient who usually has her attacks at night, when she is wakened by the aura, she groans. If, now, her husband wakens quickly and gives her a vigor is shaking, she finds that the convulsive moveme is do not come on; if he is too slow, then the c i- vulsion completes its course. Such a fact se is to show that to the same motor centre, impul se come from different directions, those from ie sensory centre tending to start the motor ce e into confused activity, those from the psych- or

mental centre tending to control, or, as it is often called, inhibit the motor centre.

In some cases of cortical epilepsy the patient describes no aura whatever. In such a case it is probable that the lesion is purely one of the motor centre. Before leaving this point, however, let me say that the presence of an aura does not enable us infallibly to diagnose the precise locality of the lesion, and this, for the reason, that the relations of sensation and motion are so intimate that we cannot entirely separate them as to cerebral localities and their mutual interaction.

You see, now, that our simple case of cortical epilepsy has considerable importance as one of the proofs of cerebral localization.

Now, let us take up another feature. You remember how I described the convulsions in a certain patient as always beginning in the left leg, if severe, involving the left arm, and if very severe, involving the opposite side of the body. Let us assume that the disturbance began in the leg centre in the motor area of the right hemisphere. Let us then picture what goes on. While we cannot describe what is that mysterious process which goes on in the brain cells when they act, yet we can use a simile to help us. Let us conceive that each brain cell contained a minute quantity of dynamite, the explosion of which caused a muscular contraction in the related muscle fibre (we must also imagine that the brain cell was able to become re-charged after a little time). Now, if the adjacent cells were jarred by the explosion, we could imagine a lot of them going off in rapid succession. It would then be expected that the greater the number of cells involved in, and the more sudden the first explosion, the greater the number of adjacent cells which would receive the shock and be themselves discharged. If the initial explosion in the leg centre were not severe, the leg centre alone would be involved, but if more severe, the adjacent arm centre would be brought into activity, and if the series of explo- were now severe, the cortical matter of the ite hemisphere would go off or be discharged. leed it seems pretty clear that some such s does occur, and the cortical substance be involved in all directions. It reminds fire in the grass burning rapidly at all around the circumference. For instance, with the leg epilepsy, on one occasion, had a particularly severe convulsion in my office, and not only were all the motor centres invaded, but the mental as well, and for a brief space she had a furious attack of mania, which required the control of four able-bodied men. You see, then again that our limited epilepsy helps us to gain some insight into the processes involved in the ordinary and graver forms. When you conceive that in a general epileptic convulsion, the discharge takes place not at a limited area, but over a large part if not the whole of the cortical substance, at once you can readily understand the wide distribution of the parts involved. Again you can understand why an epileptic falls into a comtose sleep. His cortical cells are all, for the time being, exhausted, and not until the cells have drawn from the blood a fresh supply of explosive material, can the ordinary and regular discharges be again established.

(To be continued.)

A CASE OF PERIOSTITIS ALBUMINOSA OF OLLIER.*

BY THOMAS R. DUPUIS, M.D., KINGSTON, ONT.

GENTLEMEN,—The case which I bring before you to-day is one of those diseases which acquire interest by their rarity. Rare diseases when discovered should be brought to light, and exhibited especially before medical associations, for the purpose of awakening attention to their existence. We are so constituted that many things pass us unnoticed every day, and are hence accounted rare, for which, if we were on the look out we should find to be perhaps of very frequent ocurrence. It is so with diseases, and with the symptoms of disease; and hence the propriety of noticing many things that in themselves seem trivial. This is my apology for bringing the following case before you.

In May, 1888, there was brought to me from New York State, a young man aged 22 years, to be examined and treated for a peculiar kind of swelling on the middle third of the anterior part of the tibia. The medical gentleman who had attended him there, came with him and stated to me that he was completely puzzled in the case. He had supposed it to be an abscess, and with this

* Read before the Ontario Medical Association, June, 1889.

conviction had poulticed it for some time and then opened it. His surprise was very great when, instead of an outflow of pus, as he had expected, nothing came but a yellow albuminous fluid almost as thick as the white of an egg. The substance through which he had cut, he said, was a fatty yellowish mass, looking something like the yellow fat sometimes seen in old beef, and at least three-quarters of an inch thick. Surprised as he was, however, he again applied a poultice, but having continued it for a length of time without any definite results, he abandoned its use and applied ung. resinæ, I think, under which the wound healed. For a few months after this course of treatment the young gentleman was better, suffering less pain and lameness, and being able to attend to his employment. But his former symptoms again returning, his surgeon brought him to me, as already stated, to get my opinion on his case, and to treat him if there seemed any prospect of doing him good.

His history was as follows: About a year before the time he had to desist from his regular work (that of a druggist), he had been hit on the shin by a base-ball. The injury at the time was thought nothing of, a lump rising at the seat of injury as one would expect, soreness in the part, and lameness; no pain when quiet and the leg elevated, but intensely painful when standing or walking about. He was, after several days, obliged to "lie up," as the soreness and swelling, instead of subsiding as they should have done, greatly increased, and the pain on moving around—which came on a few days after the reception of the injury—remained constant and unabated. He then consulted the medical friend who brought him to me, and his treatment was rest and poulticing, opening what he supposed to be an abscess, poulticing it again and finally inducing it to heal, as already stated.

When I saw him he was a healthy looking, well developed young man, of about 22 years of age, walking with a limping gait as from a stiff leg. He was very intelligent, and could give an accurate account of himself, and gave me the foregoing history. I need scarcely say that liniments and various other medicaments had been applied to the parts, for this you would all suppose without being told it.

On examination of the leg, I found a swelling nearly as large as, and somewhat in the shape of, the half of a goose egg, situated on the middle third of the tibia; and which, by its encroachment upon the tibialis anticus and flexor longus digitorum, and by an extension of the inflammation which surrounded the tumor, to these muscles, so interfered with their free motion, as to give him that "stiff-leg" gait which he assumed in walking. The tumor was rather sharply defined, of an elastic resistance, giving almost the feeling of fluctuation; immovable and sensitive to the touch, and seemingly attached to the bone, which could be felt to be enlarged by close examination at the sides of the base of the tumor. The scar was seen upon the surface where the opening had been made, but beyond this there was no marked change in the skin.

Taking the symptoms together, I should have considered it an abscess from periostitis, or, perhaps, osteo-myelitis; but the assurance by his attendant surgeon that he had opened it, and that nothing came from it but a yellow albuminous-looking fluid, and that the cut surfaces from which this yellow matter exuded had the appearance of yellow fat, precluded the idea of either of these conclusions. I was puzzled, and confessed myself so to his surgeon.

I presume, gentlemen, that some of you might have been puzzled also, for such cases are very rare, and in very nearly thirty years' experience, I had never before encountered one.

As there was enlargement of the bone, thickening of the periosteum, and, evidently, some exudate between them, or in the layers of the periosteum, I considered it good surgery to cut down and examine the bone and superposed parts and obtain what information I could, from observation.

The patient was chloroformed, an incision four inches in length made down to the bone, the knife passing through the very same kind of tissue as my friend had described, and from which the same kind of albumino-serous yellow fluid came, as he had previously witnessed. I was now no more enlightened than before. I denuded the bone, from which the periosteum was almost wholly detached, and found it enlarged, white, and exceedingly hard—eburnated in reality.

As there was no exostosis to be removed, nor anything that saw or chisel could take away—it being so hard in fact that none of these instru-

ments would cut it had I wished to use them—I decided on another method of treatment, novel to be sure, but which in this case did much good. I used a Paquelin's thermo-cautère, and with the flat point heated to a bright red heat, drew its sharp edge over the enlarged bone longitudinally, in five or six parallel lines, scarifying it thus from one to two millimetres in depth. I hoped by means of the burning to promote absorption, and I was not disappointed.

This was done on the 16th of May; he progressed favorably without one bad symptom, and on the 4th of June left and went home with the wound entirely healed, the tumor considerably reduced in size, and the lameness almost nothing. I need not speak of the treatment subsequent to the operation, for it was the chloride of mercury aseptic, in common use.

Sometime about the 1st of March, I wrote to Dr. M., inquiring how Mr. W. had got along. He replied that everything had gone on satisfactorily to the best of his knowledge, and that the young gentleman went back to his place to work again shortly after he came home from me. Dr. M. wrote to Mr. W. to ascertain the facts of his condition, and here is the letter Mr. W. sent me:

"DEXTER, April 28th, '89.

"Dr. DUPUIS,—I saw Dr. M. the other day, and he said you had been inquiring about me as to my leg. I went to work last September and felt very well till about Christmas, when I had to work *very* hard, and my leg began to feel bad again with the same symptoms as before. Instead of keeping quiet, I kept to work till about the middle of January, and at present I am in the same condition as when you saw me. There has been no change in my leg since then, in appearance, and the bunch remains the same (that is, as it was on the middle of January—D.) I have stopped work at present and am going to give it a rest and see what that will do.

"Yours, respectfully,

"E. W.,

"Dexter, N.Y."

ow, gentlemen, here is my case, but the ques-
ti is, What is it? That is the question which
f d itself upon my mind; and at once I began
t arch and watch medical literature that I
n find something that would satisfy me on
t point. Two or three months after Mr. W.'s
d ture, I found that his disease had been described by Ollier, under the title of "Periostitis Albuminosa."

According to Dr. Schlange, of Berlin, Ollier described fourteen or fifteen of these cases—so that, as far as we know, they are the only ones on record—he having collected them from his own practice and the literature of the subject. All the cases described were characterized by the absence of pus, and the appearance of a serous or synovia-like fluid, in connection with signs of inflammation around the bone. "Ollier," says Dr. Schlange, "was the first to point out that inflammation of the periosteum may be accompanied by the formation of a *serous* fluid, and the name of periostitis albuminosa was applied by him to this special form of periostitis." In all cases observed by him, the accumulation of fluids around the thickened periosteum formed the main change, and deeper lesions of the bone substance were not noted. Other observers obtained the same results, and Cartuffi speaks of the disease as a "periostitis exudativa." Dr. Schlange, from his own observations, differs from the foregoing, regarding the disease as a modification of acute purulent osteo-myelitis, and suggests the name "ostitis non-purulenta" as most appropriate. Some other observations were made, and in every case the citron-yellow granulations were found with an exudation of serous fluid around the seat of disease; in some, the bone was more or less changed, but in none was *pus* found, the fluid being sometimes almost like that found in old hydrocele, showing that this disease is not osteo-myelitis, although we know not but that the former disease might, under certain circumstances, lead up to the latter.

The affection occurs almost exclusively in young persons, say, from 15 to 22, and the long and tubular bones are chiefly attacked. In eight of the cases, the femur was the seat of disease; in three, the tibia; in two, the ulna; in one, the humerus, and in one, a rib. There is considerable interest attached to this form of periostitis, and if there have been but fifteen cases described, the case of Mr. W. will make the sixteenth. Had the symptoms given by Ollier been written from Mr. W.'s case, they could not have more exactly described it; and it was the exact description of the case that directed my attention to it, and then satisfied me that his was a case of "Periostitis Albuminosa" of Ollier.

To those who would read more on the subject, I may say, turn to page 150 of the *International Journal of Surgery and Antiseptics* for July, 1888, and they will find a fuller description than time and space will permit me to give here. I may conclude by saying that there is nothing there given upon treatment, and each of us for some time to come will have to be an empiric in the treatment of this disease.

THE RADICAL CURE OF HERNIA.*

BY ROSWELL PARK, A.M., M.D.

Prof. of Surgery, Med. Dept., Univ. of Buffalo.

(Concluded from July No.)

There are other methods, as is well known, Spanton's for example, but they are practised so sparingly, or else have such evident faults that I do not think it worth while to consider them here. Permit me now to describe a procedure which I have practised frequently, and to which I have held fast, induced thereto by the results of a somewhat extensive experience. Supposing, first, a case of non-strangulated hernia in which we go to work deliberately for the purpose of effecting a radical cure; time, place and surroundings being at the disposition of the operator. The patient is prepared as for any serious operation. After careful shaving and washing of the parts, incision is made over the inguinal canal and external ring, extended as much further downward in either sex as may be desirable. The hernia is at once exposed and search is made for its proper sac; sometimes this is easily found, especially when the hernia is old and large; at other times it may be so incorporated with the spermatic cord as to require a careful search. If the case be not one of congenital origin the sac is carefully isolated and separated from all its surroundings. It is often an advantage, for the purpose of security, to split up the inguinal canal to aid in this search and separation. It is my habit to usually open the sac; if it be found empty there is nothing to do but to ligate its neck as closely as possible to the internal ring. This ligation is made with a carefully prepared catgut strand; if on the other hand, there be found adherent intestine, it is carefully detached and restored to the abdominal cavity. If adherent omentum be found, I usually slit up the sac so that a ligature may be thrown around the omental mass high up the sac. It is then ligated efficiently, the part outside the ligature divided, the catgut cut short and the omental stump dropped into the peritoneal cavity. The adherent portion remaining is then removed with the extirpated sac.

If, however, we have to deal with a congenital hernia in the male, the sac is separated well down toward the testicle and a second ligature is thrown around it close to that body. By this procedure a shut serous sac is provided which shall hereafter do duty solely as a tunica vaginalis testis. The portion of sac intervening between the two ligatures is then extirpated.

In a case of inguinal hernia in the female the endeavor is made to isolate and extirpate the entire sac, following it into or drawing it out from the labium majus as necessary. The balance of the operation consists merely in the introduction of from two to four silver wire sutures between the columns of the ring and the divided edges of the inguinal canal, by which the parts are brought into close approximation. The sutures are twisted, cut short, their ends turned over and left in such a shape that no sharp ends of wire can press into or interfere with the surrounding parts. The integument is then closed over this wound with catgut sutures. If now the operation has been antiseptically performed, I have found in every instance perfect immediate union within forty-eight hours, without necessity for drainage. I have been led to the use of silver wire by experience. At first I followed Czerny's recommendation and closed the external ring with a shoe-lace suture of catgut, threaded upon two needles. Distrusting the permanency of catgut I then used interrupted sutures of silk and kept up this practice until, in one of my cases, two of the silk sutures were extruded through a minute sinus. The protection seemed perfect, but I did not like to have my sutures thus passed out. Ever since then I have used small silver wire, carefully cleansed before using, and have never known irritation to follow its use nor anything undesirable to attend the same.

The method as above described has to be some what modified in the case of femoral hernia. Here one may isolate the sac, return or remove its contents as already described, and ligate its neck,

* Read before the Ontario Medical Association, June 5th, 1889.

twisting it or not as he may prefer; but he will not find such a complete and accessible canal to deal with as in the case of inguinal hernia, nor any such ring to close. It will be but seldom in these cases that silver wire can be used to any advantage; nevertheless if the sac has been properly disposed of the wound will be filled by a cicatricial plug and the relief will be almost if not quite as perfect.

Upon umbilical hernia one may follow precisely the same general method, only modified as required by the surgical anatomy of the parts. Umbilical herniæ in adults are most commonly found in women with pendulous and very thick, fatty, abdominal walls. In such cases, while there seems to be but little external evidence of a hernial mass, there may yet be found a sac the size of an orange, and I have more than once been surprised to find how small the opening into this sack really was. Opportunity for strangulation is increased rather than diminished by so small a ring, and it seems to me that these require radical relief fully as much as any others. In several of these cases I have cut down upon the sac, which is usually, at the location of the navel, closely adherent to the skin, have separated it from all its fatty and muscular surroundings, have opened it and restored its contents according as they were intestine or omentum, have thoroughly extirpated it, have then brought together the margins of the umbilical ring, whether large or small, with catgut, and have then sewed up the abdominal wound in two or three tiers with silver or silk sutures, and have never seen the slightest disturbance follow. I have operated upon an infant but recently weaned, with rapid recovery; also upon a woman four months pregnant, of which fact I was not cognizant at the time, without the slightest disturbance, or apparent tendency to miscarriage. One remarkable case met with in this city, which I propose at some time to report in detail, occurred in a woman weighing 280 pounds, presenting a large umbilical hernia, whose sac, outside the body, was nearly as large as her head, and so pendulous that when she assumed a sitting posture its lower margin reached the chair before her buttocks did, and which presented in its thickness fibro-sarcomatous masses, that were already ulcerating externally, and were giving rise to great disturbance. I opened the sac, replaced its contents, and extirpated the balance of the whole mass, without her temperature ever reaching 100°, and sent her to her home on the twelfth day following the operation. This shows what may be done even in such aggravated cases. At first, I used to require my patients to wear a truss for a few months after the operation; at present, unless the circumstances demand it, I advise the contrary, agreeing with Mr. Kendal Franks that the pressure of the hernial pad is more likely to cause absorption of the cicatricial tissue that constitutes a barrier to the return of the hernia, and that it may be an instrument for harm rather than for good. I have, moreover, systematically added to my operations for relief of *strangulated* hernia the procedure above described, by which I endeavor to secure a radical cure—if possible—in every case. It adds an almost inappreciable element of danger, while it very materially enhances the benefit of the operation.

I do not wish to detain you longer and will content myself now with presenting a brief resumé of my personal work in this direction. For the sake of convenience as well as of accuracy I have divided my cases into two classes, one class comprising cases of active and serious strangulation, in which to the operation for immediate relief I have superadded that for radical cure; the other class comprising cases upon which I have deliberately operated at a time when no immediate or urgent symptoms required it. Of cases of the first class I have had twenty, the oldest seventy-eight and the youngest six years. Eleven of these have been males, and five females; Four of these have died, but from causes in no wise connected with the operation, unless the possible element of shock should be taken into consideration. The four were cases of desperate nature in old or decrepit individuals, from whom scarcely anything else could have been expected. I believe that the first of this series of cases in which I had operated had a partial return of his hernia, but I understand that he is now going about as usual, not wearing any truss and not suffering from any hernial protrusion that one can detect. Another case also had a partial relapse.

Of cases of the second class I report *fifty-two, not only without a death, but without the occurrence of any sign or symptom which has at any time given occasion for alarm.* Most of these cases have pursued a course as even and undisturbed as follows

the slightest operation after an anæsthetic. Only once or twice has suppuration occurred, except where a line of granulations might follow the external wound for the distance of a fraction of an inch. Fifteen of these have been in females, and of these fifteen, six were umbilical and two femoral. Of the thirty-seven male cases the hernia was in every instance of the inguinal variety. Of the entire number six have been cases of double hernia, operated upon at the same time on each side. I have no hesitation in operating upon both sides synchronously if the condition of the patient justified operation at all. In one enormously fleshy, elderly man I have made this operation with, if possible, less disturbance than I have seen following a single operation. A few of my cases are in the West, a fair proportion of them live at a considerable distance and perhaps half of them are residents of Buffalo or vicinity. It is fair to suppose that if the condition had returned in any of them I should have had some intimation thereof. Of all the cases that have come under my personal observation, I can say that not in a single one has there been any return, nor has any occurred to the best of my knowledge in any of the others. I can, therefore, claim that to the best of my knowledge and belief, I have made a complete and final cure in every one of these cases. Many of them are pursuing trades or occupations which lead to excessive labor or strain, and it seems to me that the test of final cure in many of them has been as rigid as it ever can be. I desire to conclude simply with the statement, that according to the best light that we have, it appears to me that the common forms of hernia can be now absolutely and permanently relieved with so small an element of danger that it seems as if every person otherwise reasonably healthy could be properly encouraged to undergo the operation; while even a failure, should one result, leaves the patient no worse than before; while the vast majority, if not all of these sufferers, will obtain an ample reward for the trifling danger which they have undergone.

The *Philadelphia Medical Times*, *The Medical Register and The Dietetic Gazette* have united, and will hereafter be published as a weekly, devoted to medicine, with a quarterly devoted to dietetics. The Journal will be under the charge of Dr. F. Waugh.

Correspondence.

A DEAF-MUTE RACE.

To the Editor of the Canada Lancet.

Sir,—You have doubtless noticed in various newspapers articles stating that a Deaf-Mute variety of the human race is likely to be the result, in the near future, of the marriage of Deaf-Mutes. From the information I have been able to gather up to this time, I have only heard of one deaf child in Ontario (a little boy now about four years of age), whose parents are deaf and dumb. Of the hundreds of children who are now attending, or have attended, this Institution, there is not one congenitally deaf child who has deaf-mute parents. I would like to obtain full and accurate information in regard to this matter, and if you or any of your readers know of any deaf-mute married persons, with or without children, if you or they will kindly send me their addresses, I shall feel obliged.

There are deaf children of school age in the Province that I have not heard of, and I am making an effort to get them into this Institution where they may receive an education that will fit them for the duties of life. The condition of an uneducated deaf-mute is more deplorable than that of any other human being. Will you be kind enough to help me to bring these children to school? You can do more than any other person I might address. The parents of some are not aware that an Institution exists where their deaf children can be taught to read and write. There are others who have heard of the Institution but are probably not acquainted with its real character, or from some causes, fail to send their children to us; these might be induced by a little effort to send them. Deaf children between the ages of seven and twenty are admitted, educated and boarded at the expense of the Province. It is only required that the child shall be of sound mind and that the parents, or the municipality if the parents are unable, pay the railroad fare and provide necessary clothing. Application papers may be had by writing to me at Belleville, and any information required will be cheerfully supplied.

Yours faithfully,

R. Mathison, *Supt.*

Belleville, July, 1889.

THE MANUFACTURING OF MEDICINES.

To the Editor of the CANADA LANCET.

SIR,—Having been engaged for many years in the drug business, as well as the practice of medicine, and having had occasion to feel the necessity of being in possession of pure reliable drugs for administration, and feeling the necessity a change in regard to the quality of drugs, I deem it prudent to call the attention of the profession to the fact, with the hope, that some one at the head of affairs may take active steps to see that more reliable preparations may be made. Who amongst us has not administered or used certain medicines or drugs, and failed to get the medicinal action from them? Take, for example, cocaine. How provoking, when your patient and everything associated with him is in readiness and you make your application to the eye, for instance, and after waiting due time, to find that you have been applying water or some equally inert liquid. There is no use multiplying examples, for they are numerous as each practitioner knows, but let there be a move at once to endeavor to right the wrong. I would suggest that a company of medical men, endorsed by the body of practitioners of the country, be formed to manufacture medicines, etc., for the use of ourselves, and that as a guarantee for money invested in that way, we give the company our undivided support, and for any doubt of good faith on the part of the company, a penalty be attached. The source of trouble, I believe, is in the fact that there are many manufacturing companies and each endeavors to outdo his neighbor in cutting prices, and in order to not lose money, reduces the standard of the articles manufactured. Now I am not in favor of punishing these manufacturing companies without first giving them a chance to reform, and I would be one of a committee to form notices and note results to such manufacturers. M.D.

Ontario, June, 1889.

THE LATE DR. SMITH.

To the Editor of the CANADA LANCET.

R,—Many of the older readers of the LANCET ll learn with regret the death of S. F. Smith, .P.S.O., L.R.C.P., last month. He was some iteen or twenty years ago, a practitioner in Exeter, St. Marys and Stratford, and those of his confreres who still remember him, must do so with kindliest feeling. Energetic, full of love for his profession, he came to England to acquire the degrees of the old land so prized by the Canadians of our profession. After a short stay he became so attached to London, he decided to remain and succeeded in building up a large and lucrative practice. But his field in life extended beyond the pale of actual medical practice, he was known as a man of largely philanthropic views, whose charities reached over a wide area, and there are scores of families, to the writer's knowledge, who have reason to bless the memory of so good a benefactor. He took a lively interest in Christian propaganda; and the hospitals and medical schools of England, and the continent thank him for much good done the medical student by his broad dissemination of Christian literature. The cause of death was syncope, due to cardiac failure. He retired to rest as usual in apparently good health and in the morning was dead. He was a Canadian born, 50 years of age, a student under the late Dr. Rolph, and a graduate of the old Toronto School of Medicine. Among his papers were found some eulogistic recommendations from Dr. H. H. Wright, Dr. James Richardson and the late Dr. Lizars on his application for the House Surgency, of Hamilton Hospital. A mother, eighty-one years of age, a wife and three children survive him.

H. M. COWEN.

London, Eng., July 8th, 1889.

Selected Articles.

ON THE DIAGNOSIS AND TREATMENT OF GASTRIC ULCER.

BY WILLIAM M. ORD., M. D.,

Physician to, and Lecturer on Medicine at St. Thomas' Hospital, London, Eng.

In considering this subject from the practitioner's point of view, I shall avoid recondite pathology as far as possible. But as an introduction to the study of the subject, it is necessary to define what may be called the coarse anatomy of gastric ulcer.

I think that all who have given attention to this matter will recognize the occurrence, of at least two popular forms of gastric ulcer; possibly,

quite apart from new growth, there may be other forms; but of the two I may speak with a certain amount of confidence.

The first is the deep perforating ulcer most frequently found in young women: an ulcer which typically has purely erosive characters, presenting round or oval outline, penetrating to various depths through the mucous membrane and muscular tissues, having sharp edges, undisturbed by inflammatory thickening, and crateriform shape. Such ulcer, as it penetrates through the walls of the stomach, may open vessels and give rise to hæmorrhage, or may traverse all the coats, and open into the peritoneal cavity. The term "perforating ulcer" has often been applied to it, and most appropriately. The site of such ulcer varies; but, for the most part, it occupies rather the medium zone of the stomach than either of the extremities; it affects the line of the curvatures, the lesser more frequently than the greater; but it may be found more frequently on the posterior wall of the stomach. Pathological specimens show that such ulcers may heal and leave deep, puckered scars.

The other form of ulcer is diffused, comparatively shallow, with raised or overhanging edges, irregular outline, and uneven surface. It is found more commonly in the right half of the stomach, approaching, in fact, more or less to the pylorus.

The symptoms and associations of the two kinds of ulcer differ in a marked way. The subjects of the first are young women; a very large majority of them, so far as my experience goes, employed in domestic service. As they come before us for treatment they present a curious agreement in their physiognomy. Probably the first thing attracting attention is their anæmia. It is an anæmia not by any means associated with emaciation, rarely associated with pigmentation, and on the whole associated with plumpness and transparency of the skin. A large majority of the subjects are, as regards bulk, well nourished. At the same time a large majority appear to be irregular in respect of their catamenial function, chiefly in the way of deficiency. I think we may take it for granted that menstruation is, as a rule, imperfectly established. It is not unimportant to mention that subjects such as these are, with exceeding frequency, the victims of acute rheumatism.

The symptoms presented by such subjects when suffering from gastric ulcer may be grouped under four principal heads: First, pain; second, tenderness; third, vomiting; fourth, hæmatemesis.

Pain. The pain is usually not continuous, but occurs after food-taking, sometimes immediately, sometimes after an interval of half an hour, or an hour, or even more. It is generally of a very acute kind, and recurs at a particular spot after ery meal, being sometimes limited to that spot, sometimes extending in various directions. Thus, for instance, a pain regularly beginning at a point in the epigastrium will extend to the back and radiate upward over the chest; or beginning in the back may extend upward along the vertebræ, and forward into the epigastrium. During the existence of the pain there is usually much tenderness over the epigastrium, whatever part of the stomach may be exposed to pressure. Should vomiting occur, the pain is subsequently annulled or greatly mitigated. In well-marked cases of gastric ulcer, pressure over the epigastrium and stomach-area usually produces pain at all times, increased, as has been noticed, when internal pain occurs after food-taking. We shall see presently that such tenderness may be determined by two conditions: first, by ulcer; second, by gastritis; but before going further it may be urged that the tenderness of ulcer is much more acute than that of gastritis.

The importance of vomiting as a sign of gastric ulcer has been variously estimated. Some authors would regard vomiting as a more important symptom; some would rely more upon the character and sequence of pain already described. It is certainly true that many variations in the proportion of the two systems are to be observed. But in my experience, vomiting as an isolated symptom, is less decisive than pain. As a conjoined symptom vomiting has an importance often decisive. When pain has, for instante, already occurred, and has lasted for a time proper to the particular case, vomiting takes place and brings immediate relief. It is true that there may be many variations in the severity of the pain and the persistence of the vomiting; but both symptoms being present, the meaning of the succession can hardly be doubtful. The observation of the matters vomited is, of course, an important point in diagnosis. They may consist of food hardly altered; of food partly digested; of food mixed with abnormal gastric juice; of food mixed with mucus in various proportions; and of blood variously mixed. In other words, we may have such irritability of the stomach as determines at once the rejection of what has been received. We may have next, owing either to the position of the ulcer or to impairment of the action of the stomach, rejection of the food at a later stage of digestion; the rejection being determined, in one case by disturbance of peristalsis, in the other, by the irritation of ill-digested matters. The presence of much mucus in the vomit will indicate the complication of gastric catarrh, a subject of much importance in relation both to the diagnosis and treatment of gastic ulcer; a subject which we shall have to discuss more fully later.

The hæmatemesis of this form of gastric ulcer has very distinctive characters. It is very rarely continuous, very rarely small in quantity. Our

general experience is that women suffering from some of the symptoms already detailed will have once, or once and again, or on several occasions, profuse gastric hæmorrhage, bringing them into the jaws of death, but very seldom actually killing them. The blood thus vomited is mostly coagulated, and, by reason of its volume, little affected by the gastric juice. The anæmia of such cases very reasonably leads to the suspicion that hæmorrhage in bulk inadequate to the production of vomiting may have occurred often, and may have contributed to the characteristic anæmia.

With the more decisive signs so far considered, young women suffering from gastic ulcer present many secondary symptoms, such as anorexia, excessive appetite for food, or depraved appetite, particularly for acids; constipation, or, more rarely, diarrhœa; headaches, particularly frontal; neuralgia, shortness of breath, palpitation, undue pulsation of the abdominal aorta, tinnitus, giddiness, and the symptoms which are grouped under the head of hysteria.

So far we have been getting before our eyes a general view of the aggregate of symptoms. But it must be remembered that there are many variations which are to be observed in each and all of them. The pain, for instance, varies considerably as to time, position, and character. In some cases it arises shortly after taking food, or even during a meal. There is every probability that such sudden occurrence is induced by a definite position of the ulcer, viz., of the cardiac end of the stomach. Later occurrence of the pain in all probability marks increasing distance in the position of the ulcer from the cardiac orifice. But while inferences drawn from anatomy have a definite value, we have to take into account the conditions of the stomach generally, and also of the patient.

My experience is to the effect that in not a few cases where the localization of pain is far toward the right limits of the stomach, the ingestion of food excites at once the suffering. There is evidently a hyperæsthesia of the whole organ, which may be simple or dependent upon catarrh associated with the ulcer. Where there are much anæmia and much general nervous susceptibility, we may, on the whole, regard the early occurrence of pain as a mark of simple hyperæsthesia. Should vomiting occur we have an important commentary in the character of the egesta. For instance, the absence, or presence in varying quantities of stringy mucus will help us to understand the meaning of the early access of pain. I do not refer to these varieties in a spirit of curious observations. In my experience they have important relations to treatment with which I shall deal later on.

Under the head of time of pain we must include duration. In gastric ulcer uncomplicated by inflammation of the stomach, the duration of pain is comparatively limited; for the most part certainly it is not felt when the stomach is empty, or comparatively empty; though I must admit there are exceptions to the rule. A long duration of pain, particularly if it follow vomiting, and, still more, vomiting of much mucus, will mark the existence of much accessory gastric inflammation. The position of the pain varies considerably, sometimes it is in the epigastrium, where a distinct and limited tender spot can be detected by pressure. Often it is felt in the back, so that tenderness is referred to the vertebræ.

The varying conditions of the pain will be, no doubt, generally marks of the position of the ulcer. So, also, will be the attitudes of the patients during the paroxysm. We may well believe that a patient having gastric ulcer will instinctively assume such a decubitus as will obviate pressure of ingested food upon his or her tender point. Accordingly if the ulcer is, as it very commonly is, on the posterior wall of the stomach, the patient will be found lying prone or semi-prone, with the knees drawn up. I have seen several cases in which patients, complaining of violent pain in the back after food-taking assume such an attitude. The limits of my paper are too short to follow out other attitudes, and I will not discuss this point further.

In considering the symptom of vomiting we find, in the first place, that, as in the case of pain, the period at which vomiting occurs may, to a certain extent, indicate the position of the ulcer. Early vomiting after food goes, as early pain, to indicate cardiac position. Late vomiting, and, still more, vomiting occurring after several successive meals, would tend to localize the ulcer in the pyloric end of the stomach. In these latter cases the amount vomited is usually very large, appearing often to be in excess of what has been previously introduced into the stomach. To repeat, the relative importance of pain and vomiting as signs of gastric ulcer is, as I have noted, by no means uniform. On the whole, I should be inclined to attach a higher importance to the pain than to the vomiting, while urging that every case has to be examined by itself in all its bearings.

As regards hæmatemesis, I have already noticed that in this form of gastic ulcer it occurs at long intervals and in large quantity. Here, however, qualifications are needed—hæmatemesis does not occur at all in many subjects of gastric ulcer. The non-occurrence of hæmatemesis, however, does not preclude the occurrence of gastric hæmorrhage, particularly where vomiting is less marked than pain. Several times I have been able to verify the appearance of melæna where no blood was ejected by the mouth. It appears to me probable that melæna is more frequently present than identified, and that it sometimes contributes largely to the anæmia belonging to this class of disease. The occurrence of "coffee-grounds" ve-

iting is decidely rare in this form of affection, but where vomiting is severe and much mucus is brought up, streaks of blood may be observed in the mucus. These probably belong rather to gastric catarrh than to gastric ulcer itself. In the few cases of "coffee-grounds" vomiting, accessory symptoms are generally present, suggesting deep extension of the ulcer to surrounding organs after the formation of adhesions. Here generally the history of the case elucidates its meaning.

In some cases, after the persistence for a considerable time of the average symptoms, either pain or vomiting or both will become generally more constant and less definitely related with food-taking. The signs of gastric catarrh will be aggravated, and very often strange variations of appetite will obtrude themselves. These generally consist in depravation rather than loss of aptite, and lead us into new ground. I may quote a case in point. A lay-sister in a home presented, for several years, recurrently the ordinary signs of gastric ulcer. At length the pain became persistent, and had constant tenderness associated with it. Vomiting became exceedingly frequent, and blood was often present. The patient steadily developed an inordinate appetite, and a curious predilection for one kind of food. For several years she took nothing but mashed potatoes freely enriched by butter. Feeling pain and craving, she would call for this. She would partake of it freely, and feel for an hour or so, comforted. No other food and no medicine afforded any similar relief. She was in the habit of rejecting this magma between an hour and two hours after taking it. Her distressing conditions at once returned, and she promptly took another instalment. The process was repeated from eleven to fourteen times within the twenty-four hours. Seeing that this patient had, in the earlier stages of her illness, the ordinary signs of gastric ulcer, and investigating her later symptoms, I came to the conclusion that the ulcer or ulcers had penetrated deeply, and had led to adhesions between the stomach and adjoining organs, with the result that the walls of the stomach were prevented from collapsing when that organ was empty. Perhaps one of the uses of a paper such as this is to raise side issues of interest.

Physiological observations and general experience go to show that when the walls of an empty stomach are prevented from coming into contact, sensations of extreme hunger arise. A converse practical illustration is afforded by the fact that a tight girdle placed over the stomach diminishes the intensity of hunger in people who are not able to obtain food. I have seen one remarkable case illustrating, to all appearances, the effects of the impossibility of the stomach to contract during excessive hunger. An elderly gentleman was under my care for several years. He was literally the shame and opprobrium of his family by reason of his vast and inconsiderate appetite. He was accustomed to eat voraciously of whatever was set before him, with a special selection of the richest possible dishes. That he vomited freely after such indulgence made no difference to him. His one object in life seemed to be to fill his stomach, and to clog it with what might seem to be most oppressive. I had the opportunity of making a "post-mortem" examination, when it appeared that, as a result of an old abscess connected with the gall-bladder, adhesion had occurred between the stomach and all surrounding parts. When the abdomen was opened, the stomach was found to be not a movable viscus, but a large, permanent cavity, firmly bound to the adjacent organs, as if nothing like a peritoneum had ever existed. The smallest diameter of the cavity was at least two or three inches, and no pressure could have brought the mucous surfaces into contact. In the case of the lay-sister I have mentioned no "post-mortem" was permitted; but the two cases were so parallel in their symptoms that I think there can be little doubt of the application.

Diagnosis.—In the differential diagnosis of this form of gastric ulcer, at least three or four conditions, producing somewhat similar symptoms, have to be excluded. First, gastritis, acute and chronic; second, malignant disease of the stomach; third, the functional disorders of the stomach comprehended under the term dyspepsia; and, lastly, in a few cases, the acute dyspepsia or gastric crisis of locomotor ataxy.

To compare, in the first place, the signs of gastric ulcer with those of gastritis, acute or chronic, we may notice important differences in the character and duration of the pain. In gastritis we find an epigastric distress of a constant character, markedly contrasted with the evidently induced pain of ulcer. The distress consists in a sensation of oppression, distention, and heart-sinking, of course more pronounced in acute gastritis, the subjects of which complain of a feeling which they describe as "bursting." In addition to these sensations, pain belongs to all three conditions; constant and grinding in acute gastritis, more or less constant in chronic gastritis, though here the milder form of the pain enables us to see that it is aggravated by food-taking. But in either case it is not relieved by vomiting. Vomiting is present in all three; constant in acute gastritis irrespective of food; frequent in chronic gastritis, usually sometime after food-taking; present or absent in ulcer; when occurring therein, giving a relief far more marked than in the inflammatory conditions. The character of the matters vomited will be, in the case of acute gastritis, inflammatory. There will be little food, much tenacious and adhesive mucus; streaks of blood; and as the process advances an intermixture of pus. In

chronic gastritis still much mucus, not adhesive, yellowish or opaque, this either alone or mixed with food. Mucus occurring in the vomit of ulcer will generally indicate the existence of chronic gastritis.

Palpation enables us to recognize very different forms of tenderness; this is considerable and constant in acute gastritis, very light pressure over any part of the stomach-area producing great distress. In chronic gastritis there is diffused but dull tenderness, brought out only by comparatively deep pressure, but sufficient to make the wearing of a closely-fitting dress a cause of considerable discomfort. The more acute and localized tenderness of gastric ulcer has already been noticed.

There are one or two more signs of minor importance. In acute gastritis we may expect to find marked rise of temperature, headache of considerable intensity and constancy, mainly frontal in locality. Thirst as of the desert, a very foul and usually dry tongue, and a fetor of breath almost as proper to the affection as the scent of a particular flower. In chronic gastritis there is rarely pyrexia, headache is common but intermittent, and the other symptoms cannot be spoken of seriously. In gastric ulcer all this group, except headache, are usually absent, and headache, if occurring, is frontal, and coincides in time with the other symptoms.—*Am. Jr. of Med. Sciences.*

(*To be continued.*)

THE TREATMENT OF INEBRITY IN THE EDUCATED CLASSES.

It requires but little reflection to enable one to understand that the treatment of inebriety should be along very different lines according to the varying social conditions of the patient. This is true, indeed, of nearly all diseases the types of which often differ widely according to the surroundings of the patient, but of none is it more true than of nervous affections, and especially, perhaps, of inebriety. The inebriate who has been born and has passed all his life in the slums of a large city is very unlike, in both normal and physical constitution, the well-to-do gentleman, whose surroundings are the most refined, and who deplores his infirmity and shudders to think of the world of his associates becoming sharers in his secret.

The management of cases falling in the latter ategory is the subject of a communication read efore the London Society for the Study of Inebrity, on January 1, 1889, by Mr. James Stewart. he author starts out with the assumption that in very inebriate there is an absolute degeneration brain elements, and that upon this depends loss will-function. This being admitted, the treatent should be so directed as to assist nature in her efforts to regenerate the injured nerve-tissue, to build up again the brain elements through the medium of which the will-power and other functions are exercised. In order to do this, total abstention from alcohol is absolutely essential, and nothing containing alcohol, not even the lightest wine or beer, is to be permitted at any time, even during the intervals of the drink-craving. The will of the patient being weakened, he must live under the constant supervision of the physician. For this purpose the author advises a residence in the country, in the home of some medical man. The latter should not be in active practice, but should be in a position to devote his entire time to the patients, not more than five or six, entrusted to his care. If there be a greater number of "guests" than this, the domestic family feeling would be destroyed, and the inebriate will come to regard himself as in an asylum rather than a private house.

The life at home is to be made as little irksome as possible, and amusements of various sorts should be provided. The patient, if he have no literary tastes or no hobby, such as painting, wood-carving, or the like should be induced to take up something like photography which will consume much of his time and lead him out frequently into the open air. He should also be encouraged to take up pedestrianism, being accompanied in all his walks, of course, by the physician or his deputy, and should be taken frequently to public meetings, concerts, lectures, cricket-matches, and the like. The physician will be greatly aided by a pleasant and energetic wife, or female members of the family, who may assist in the entertainment of the guest in the home circle during winter evenings and at other times. If the patient is a lady the help of the physician's wife is, of course, absolutely indispensable.

This is briefly the plan of treatment advocated by Mr. Stewart for the intelligent inebriate who is earnestly desirous of overcoming his infirmity and is willing to submit for a period of a year to a moderate degree of restraint, putting his will to a certain extent in the keeping of the physician. But, and especially at the beginning, something more is needed than mere occupation. It is necessary to moderate as far as possible the craving for drink, which returns with almost irresistible force at frequent intervals, and also to overcome the depression from which the inebriate is usually suffering when he first reaches the house. For the latter it will be necessary to administer, at intervals of an hour or two at first, egg and milk, beef-tea, milk and lime-water, soda and milk, and other easily assimilated beverages. The sleeplessness from which almost all inebriates suffer at first is best treated by a draught composed of 20 minims of the solution of bimeconate of morphine with 10 or 15 grains of chloral, alternated for a few nights

with other hypnotics. Sulfonal will doubtless be found very serviceable in such cases. The author protests against the idea that by the exhibition of drugs, such as capsicum, perchloride of iron, or strychnine, the craving for alcohol may be destroyed or kept under. It may perhaps be smothered for a while, he says, but he believes that by this treatment the physician is only substituting one enslavement for another. The same is true to a certain extent in respect to aerated beverages. Without absolutely interdicting the latter he recommends his patients to do without them, and to drink plain water at their meals and take plenty of milk with either tea or coffee, or, as he prefers to either of the latter, cocoa. The diet should be plain and unstimulating, and all condiments should be avoided at meals. If the patient suffer from pain in the stomach after the ingestion of food he should take large draughts very of hot water twice or three times a day. Smoking should be reduced if it cannot be entirely given up.

The author summarizes his conclusions, which he has arrived at as the result of constant clinical study during the last twelve years, as follows:

1. Drunkenness and inebriety ought not to be confounded. 2. Inebriety is a lesion of the brain which has gone so far as to affect the will-power. 3. Successful treatment based on this pathological dictum must include the absolute cessation of alcoholic drinking. 4. There is no danger in the sudden and complete withdrawal of alcohol if the case—no matter how severe—be in the hands of a skilful physician able to personally direct the hourly treatment from the first. 5. The physician undertaking the charge of such cases ought to be a total abstainer, as well as everyone living under his roof, so that normal treatment by example may supplement therapeutic remedies. 6. Permanent recovery need not be hoped for unless both lines of treatment be pursued, systematically, during an uninterrupted period of twelve months in a "Home" from which every beverage containing the smallest quantity of alcohol is absolutely excluded. The first four months barely suffice for the getting rid of the stomach and other troubles which are the result of the alcoholic poison; at the end of the second period of four months the patient begins to feel less the want of alcohol; by the end of the third period he has begun, perhaps, to understand that life may be enjoyed and vigorous health secured without stimulants. 7. So called "cures" effected by bark, strychnine, iron, and other drugs have not proved permanent. 8. The permanence of a cure depends greatly on the after treatment pursued subsequently to the patient leaving the "Home."

The family of the inebriate, or the household of which he or she is to form a part, ought all to become total abstainers, no alcohol being allowed under any circumstances into the house except as a drug prescribed by a medical man and dispensed in a medicine bottle.—*Med. Rec.*

THE ACT OF MENSTRUATION VIEWED FROM AN INVERTED UTERUS.

During a visit in August to my friend Dr. H., of Warren county, N. Y., I was invited to see a case of inverted uterus which had been under her observation for treatment, a short time before my arrival.

History.—Margaret, æt. about 30 years, multipara—occupation a basket weaver, was delivered of a child five months before at term. The placenta was adherent, and the attendant pulled it away, leaving the vagina filled with a mass supposed to be a tumor. When she applied to Dr. H. for treatment she was much reduced and very nervous. Upon examination the uterus was found to be inverted. Proper treatment was given, and when she was able, a reduction was attempted, but failed because the patient refused to take an anæsthetic, and was too feeble to have it done without. She left the place, but returned a few days before my visit. She came to the office, complaining of hæmorrhage. It was found that she had been menstruating for four days for the first time in five months, or before the birth of the child, and that she was flowing more freely than was her normal habit; had much pain, nervousness and prostration.

Having seen but one case, and that through the courtesy of Dr. Munde, at Mount Sinai Hospital, a few weeks before, I was eager to examine the case and watch the act of menstruation, and settle in my own mind a point which *advanced* gynæcology has been foreshadowing for some time, viz.: That the tubes play the most important part in the act of menstruation.

Upon examination I found the diagnosis of inverted uterus to be correct. The left ovary filling Douglas' cul-de-sac, and the right one lodging above the ring formed by the neck of the uterus. The tubes were dragged down and put on a strain in the sac formed by the peritoneal surface of the inverted uterus. The surface of the tumor was of a dark red color, studded with points of a darker hue and resembled the tongue of a bad case of scarlet fever without the creamy coating. From this surface no discharges, to speak of, could be wiped away with cotton; but from the tubes a dark healthy menstrual flow passed out drop by drop, and when the tubes were pressed upon would form a stream for an instant.

. . . . . .

If the menstrual flow does take place from the tubes, many things will be made plain, which now confuse gynæcological and midwifery practice, and will overturn hitherto preconceived ideas with re-

gard to the functions of the uterus and its appendages.

Dr. Johnston, of Kentucky, the leader in advanced researches on the uterus and menstruation, divided the uterus into two segments, the neck and body—the functions of which differ materially. Again he demonstrates "that the corporal endometrium has an entirely separate nerve plexes, entering it at either cornu, from the centers imbedded in the broad ligaments and tubes" He makes the body of the uterus an entirely separate organ, with its own special nerve supply, and with its distinct function. Again the openings of the tubes of this inverted uterus were dilated, so as to admit the head of a small uterine sound.

Do the tubes dilate during the menstrual flow? If so, cannot treatment be made directly to the diseased tubes in cases where operations cannot be performed, as the urethras are catheterized? And may not tubal pregnancy be more explainable? Mr. Tait says, "All ectopic conceptions are primarily tubal.

In this case of a healthy woman, the excessive flow was undoubtedly caused by the hyperæmia of the tubes from the dragging strain and the misplacement of the uterus. In Battey's operation, it is proven that the failure to produce the menopause, which sometimes happens, occurs from not removing the tubes close to the uterus Does the scanty flow of the menstrual blood, which first induces women to seek medical advice, and which often precedes graver diseases, tend to show that the menstrual flow has its origin in the tubes?—*Gaillard's Med. Jour.*

THE ACTION OF OIL OF TURPENTINE IN IDIOPATHIC CROUP.—Lewentaner (*Centralbl. f. klin. Med.*) formerly reported his success with oil of turpentine in the treatment of croup, but there might possibly be a question raised about the correctness of his diagnosis, since no membrane was found expectorated. He now reports two other cases, both of them *in extremis* when the treatment was commenced, and both of which were saved, apparently by the use of turpentine.

The first case was a child of two years, who had exhibited signs of stenosis for several days, and who had reached about the seventh day of the disease. When first seen by the author the asphyxia was extreme, the cough entirely aphonic the face pale and livid, and the pulse scarcely perceptible. No membrane had been expectorated. A teaspoonful of oil of turpentine was administered, and ice compresses put around the throat. The child slept more quietly through the night, received another dose of turpentine on the next morning, and during the day expectorated a portion of membrane of considerable size. Under continued administration of turpentine in smaller doses, improvement steadily progressed.

The second case was that of a child of four years, who had been attacked suddenly with symptoms of stenosis, and was in the eight day of his illness when seen by the author. He then exhibited extreme dyspnœa, with pale skin, and filiform and scarcely perceptible pulse. There had been no membrane expectorated. A teaspoonful of oil of turpentine was given, and the continuous atomization of a mixture containing turpentine prescribed. Very soon after the ingestion of the drug there was a violent paroxysm of coughing, and a large piece of membrane three to four inches long was expectorated. As it, however, continued to form, the treatment was persisted in, a teaspoonful of the medicine being given twice a day. Membrane was coughed up in abundance, and in a few days the child was well. The author is fully convinced that turpentine has a specific action on the disease. —*Am. Jour. of Med. Sci.*

IMPROVED TREATMENT FOR TINEA TONSURANS.—Although in most cases this disfiguring disease yields readily to one or other of the many applications which are recommended for it, yet in some cases, as the physician knows to his grief, it proves extremely obstinate, and the wisest efforts serve only to suppress it for a time. Some years ago Dr. Harrison, of Bristol, attempted, in a paper before the British Medical Association, to lay down more clearly the principles upon which successful treatment must be based. He showed that two sets of agents were needed: the first, an agent to dissolve the hair and to expose the fungus in its lurking places in the cuticle, hair, and hair-follicles; the second, a parasiticide to destroy the fungus. For the first he recommended a solution composed of liquor potassæ, spirits of wine, and iodide of potassium; for the second a solution of mercuric chloride in spirits of wine and water. By this method, through the softening action of the alkali, the iodide of potassium was allowed to soak into the parts affected, and then the application of the mercuric solution formed the very excellent parasiticide, biniodide of potassium, in and about the tissues occupied by the fungus. In the *British Medical Journal*, March 2, 1889, he presents a simpler plan, in which the drugs are applied in the form of ointment. He finds that patients will carefully rub in an ointment, when they will not take the trouble to properly apply a solution. The ointment which he uses is made as follows: Caustic potash, gr. ix.; carbolic acid, gr. xxiv.; lanolin and oil of cocoa-nut, of each, ʒ ss. The ingredients must be well rubbed together, and a little oil of cloves, lavender, or rosemary may, if desired, be added. A small portion of the ointment is to be rubbed on the affected part, night and morning. The alkali softens the hair, and allows the carbolic acid (it should be remembered that car-

bolic acid is not an acid, and does not combine with alkalies) to reach and destroy the fungus. He thinks it is better not to shave the part, but to leave the hair at least a fourth of an inch long, as the ointment is then kept upon the part.

To prevent infection from ringworm of the scalp, he employs an ointment of the following composition: Ointment of boracic acid, and ointment of eucalyptus, of each ʒ ij.; oil of cloves, ʒ ss.; oil of cocoa-nut, enough to make ʒ vj. This, he says, constitutes a very elegant pomade even for general use, and is also an excellent prophylactic pomade. When ringworm makes its appearance in a family, he recommends that this prophylactic pomade be applied daily, not only to the healthy parts of the patient's scalp, but also to the heads of the other children in the family. To test its protective powers he has in three cases placed infected hairs on the heads of healthy children, and then first applied the pomade on the next day. None of the children caught the disease. The great confidence which he feels in the efficiency of the methods described above is founded upon the observation and treatment of more than one hundred cases of tinea tonsurans. —*Med. Rec.*

Chlorosis.—Dr. Huchard, *Rev. de Clin. et Thèrap.*, points out that it is a mistake to push the ferruginous treatment in all cases of chlorosis. The total amount of iron in the body under ordinary circumstances is not more than a few grammes, and even in chlorosis all of it has not disappeared. Any surplus iron is more likely than not to give rise to gastro-intestinal irritation. He prefers to give the iron in the form of iron filings mixed with chalk, powdered coffee, or rhubarb, in the form of a powder. Vinegar, to which chlorotic patients are often extremely partial, is not to be absolutely forbidden; on the contrary, a draught containing hydrochloric acid, taken after each meal, is a powerful aid to digestion. The constipation should be overcome by means of podophyllin, and the uterine functions should be stimulated at the approach of the menstrual epoch by means of hot baths and an infusion of saffron internally. Massage and general gymnastics are also to be commended as adjuncts. In many cases when iron has failed, arsenical preparations, in conjunction with bitters, are successful, and the binoxide of manganese has given good results when both iron and arsenic had been tried in vain. The binoxide can be given in a powder with charcoal and powdered calumba root, or it may be given in the form of the lactate of manganese, made into pills with extract of cinchona. When iron is well borne he recommends the following formula:—℞ Ext. cinchonæ, ext. gentianæ, ext rhei., āā, 5 grammes; ferrum tart., 5 grammes; ext. nucis vom., 50 centigrammes; ol. anisi, ɱv.; glycerine, q. s. To be mixed and divided into 100 pills. Two to be taken before each meal.—*Lond. Med. Rec.*

Salicylate of Mercury.—Dr. W. C. Caldwell, of Chicago, Ill., in an original communication upon salicylate of mercury in the *Therapeutic Gazette*, concludes thus on this drug:

"1. Because the salicylate is likely not absorbed from an acid membrane, it will usually produce less derangement of the stomach than the bichloride.

"2. Because the mercury is combined with an organic radical, it will produce less irritation during both first- and elimination-contact actions than the bichloride.

"3. Because the salicylate contains less mercury and acts slower than the bichloride, it has less action on albumen and on bacteria of putrefaction and far less on digestion.

"4. Because the salicylate passes through the stomach to the duodenum and there is disolved, it appears that exhibited with hydrochloric acid it would be better adapted for an intestinal antiseptic than the bichloride, which probably is dependent mainly on its elimination-contact action in the intestinal canal.

"5. Because the mercury is combined with an organic radical, it should not be prescribed with mineral salts of the heavy metals.

"6. Because iodide of potassium given with it converts it into the biniodide, the salicylate should not be exhibited at the same time, unless it be in small doses.

"7. Because the salicylate is insoluble in acids it should not be prescribed with drugs requiring an acid menstruum for solution.

"8. Because chemical change occurs when combined with muriate of cocaine, they should not be given together,

"9. Because the bichloride is probably more active and effective in syphilis, it probably is the best when it agrees.

"10. Because the bichloride has such marked climination-contact action, it is the better when such action is desired, as in acute tonsillitis, parotitis, etc."

Cancer of the Tongue.—Jacobson (*Am. Jour. of Med. Sci.*) emphasizes the need of recognizing the precancerous stage at the beginning of tongue cancer and the early removal of the growth. The precancerous stage he defines as "a stage in which inflammatory changes only are present, any ulcerative and other changes in the epithelium which may be present not amounting as yet to epithelioma, but on which epithelioma inevitably supervenes." To recognize this stage he considers the duration of the ulcer, its obstinacy to treatment the age of the patient, absence of duration or fix

ity, careful scraping of the surface of the sore, and microscopic examination. For the small percentage of permanent cures he blames both the surgeon and the patient for delaying the operation and cultivating the cancer. Even where permanent cure is impossible, not only are months of life gained by the operation, but much comfort, because death from recurrence in the cervical glands is less painful and noisome than from the original lesion.

He considers four methods of operation—Whitehead's, Syme's, Kocher's, and that by means of the écraseur. Of these he prefers Whitehead's, of which he has made some modifications. He prefers to perform a preliminary laryngotomy and to plug the fauces in cases where the growth extends back into the posterior third of the tongue, when the surgeon is doubtful regarding his ability to control the hæmorrhage, and when the floor of the mouth is at all involved. He also splits the tongue before removal, because it is then easier to control hæmorrhage, and in certain cases it may be safe to leave half of the tongue. He combats the opinion that leaving half of the tongue is useless, and maintains that, on the contrary, the patient has most serviceable control over the half which is left. When the disease is very far back and unusual difficulties are present, he slits the cheek as far back as the anterior border of the masseter. He does not approve of preliminary ligation of the linguals.

A brief description is given of Syme's and Kocher's methods. Both are severe and should be reserved for cases in which Whitehead's operation would be insufficient to remove the disease on account of the involvement of the floor of the mouth or of the cervical glands.

The écraseur he does not recommend, because, however well behind the disease, the loop is placed, it tends to come forward, as it is tightened closer and closer to the diseased tissue, until, if it does not encroach on this, it may upon tissue in its close contiguity ready to take on disease and also because of its failure to successfully divide the lingual arteries. The galvanic écraseur is mentioned only for condemnation.

For some days before the operation Mr. Jacobson makes the patient practise washing out his mouth frequently with Condy's fluid, sitting up, with the head alternately dependent on either
[illegible]. Also he makes the patient accustomed to
[illegible] himself with a tube attached to a feeder-spout
[illegible] passed by himself to the back of the throat.
[illegible]er the operation he brushes over the surface
[illegible]'n a solution of zinc chloride, gr. x to ℥ j. or of
[illegible]oform ether. Morphine is given freely, and ice
[illegible]ick. Food is administered by means of a soft
[illegible]phageal tube.

[illegible]e causes of failure as he enumerates them
Septic diseases of the lungs, hæmorrhage, cellulitis, erysipelas, pyæmia, exhaustion, more rarely shock, œdema glottidis, suffocation from falling back of the tongue, and recurrence.—*N. Y. Med. Jour.*

Pathology of Chronic Alcoholism.—The Pathological Society of London has devoted much time recently to a consideration of the pathology of chronic alcoholism. The discussions have been prolonged and very interesting. The following brief review of them, taken from the *Quarterly Jour. of Inebriety*, April, 1889, will prove of interest.

Dr. Payne, in his opening and closing of the debate, insisted clearly on stating his belief that the ordinary pathological conception of cirrhosis needs reconsideration. He demurred to regarding it as a mere inflammation of the interstitial stroma of the liver set up by alcohol introduced through the portal vein, and producing great quantities of new fibrous tissue, which by pressure destroys the hepatic cells. He insisted that the destruction of cells and the hyperplastic inflammation of connective tissue take place concurrently, and in this view he was supported by Dr. Lionel Beale, who held that the essence of cirrhosis is atrophy of cells, and not inflammation of connective tissue. Dr. Dickinson stoutly maintained that the overgrowth of fibrous tissue is the essence of cirrhosis; and Dr. Sharkey showed specimens of apparently healthy liver cells side by side with masses of newly-formed connective tissue even in advanced cases of cirrhosis. He suggests that the liver cells seen in such connection with newly-formed fibrous tissue may be newly-formed cells; his hopeful view of the formation of new cells and new bile ducts is especially noteworthy; in other words, there may be a restoration of tissue in a diseased liver, a possibility supported, as he says, by clinical experience of cases of recovery from grave degrees of hepatic disease.

Not the least interesting part of the debate was that having reference to alcoholic paralysis and other forms of nervous disease produced by alcohol. What is eminently worthy of the attention of practitioners in this connection is the frequency of tuberculous disease in cases of alcoholic paralysis. In fact, the association of chronic alcoholism in all forms, and tuberculosis was brought out by almost every speaker, including Dr. Payne, who said truly that the inaccurate impression that habits of alcoholic excess are in any way antagonistic to tubercular diseases must be regarded as swept away. Dr. Dickinson's investigations into the comparatively much greater frequency of tuberculosis in publicans and others whose occupations and habits expose them to the evil of chronic alcoholism, were the first to open the eyes of the profession to the fallacy that alcohol antagonizes tubercle. Many eminent medical men have

felt with Dr. Dickinson that, as alcohol does so much harm, it surely must do some good. But, so far, the good that it does or the evil that it prevents has not been made very manifest. They need more definition. Dr. Izambard Owen says the statistics of the Collective Investigation Committee show that the consumption of alcoholic liquors appears to check malignant disease. This statement should now be tested very rigidly. Malignant disease is said to be on the increase. We have seen the demolition of the belief that alcohol is a preventive of tubercle; it would be some set-off against the mischief it works if it could be shown seriously to antagonize cancer.

The views and opinions of the many leading men who participated in this discussion were expressed in a scientific spirit, not as absolute or final, but as the most probable facts sustained by our present knowledge of the subject.—*Med. and Surg. Rep.*

Meniere's Vertigo.—Brunner, of Zurich, formulates the following conclusions regarding this disease (*Annales des Maladies de l' Oreille.*)

1. The name Ménière's disease is no longer applicable to any special and distinct affection, but rather to a complex set of symptoms; hence the name should be changed to Ménière's vertigo.

2. Under this head there should be placed only those cases in which the attacks come on suddenly, without known cause, at distinct and prolonged intervals, without fever, preceded by a more or less intense subjective noise in the ear, and followed by a more or less rapid deafness. This definition excludes vertigo dependent upon mechanical causes in the middle ear, as well as permanent vertigo due to acute labyrinth diseases.

3. Without doubt cerebral lesions, and especially cerebellar lesions, can produce Ménière's vertigo without any positive diagnostic sign. This difficulty does not often occur, because it is rare that such lesions produce deafness, excepting in cases of pressure on the fibres of the acoustic nerve.

4. Ménière's vertigo has generally as a fundamental cause some pathological change, either primary or secondary, in the labyrinth.

5. Nosologically we must distinguish between the grave cases and the light ones, as those consecutive to otorrhœa.

6. Some of the grave ones may be connnected with hæmorrhages in the labyrinth; some of the light ones with a vaso-motor neurosis.

7. Generally, Brunner thinks, too important a role is ascribed to hæmorrhage, although many cases are doubtless due to a pathological modification of the blood-pressure in the labyrinth: *an obstacle in the efferent canals of the perilymph and ndolymph is an important factor in the pathogeny of this disease.*

8. In favor of the vaso-motor origin of Ménière's vertigo there may be adduced the following reasons: (*a*) The vertiginous aura preceding the attack. (*b*) Slight functional troubles show themselves only slowly. (*c*) A certain regularity in the frequency of the attacks. (*d*) The effect of quinine or even galvanization of the cervical sympathetic in moderating or arresting the attacks.

9. According to the experience of oculists, large doses of quinine provoke ischemia of the retina, and, as we all know, the labyrinth is also thus congested. We can thus explain the favorable action of this drug in cases of Ménière's vertigo.—*Am. Jour. of Med. Sci.*

Treatment of Jaundice from Retention.—Dr. Le Gendre gives (*Concours Méd.*) the following treatment for this affection:

1. *Absolute Milk diet*, consisting of five pints of milk taken pure or in an alkaline medium, in quantities of eight ounces every two hours.

2. *Intestinal antisepsies*, for which the following powders are to be taken:

℞.—B. Naphthol (finely powdered), 23 grs.
Salicylate of bismuth, ... 15 grs.—M.

Divided into ten powders; one to be taken every time that some milk is taken.

3. *Sponging the body* every morning and evening with cold water, to which the following has been added:

℞.—B. Naphthol, ... 1 part.
Water, ... 5000 parts.

Heat and dissolve, filter and allow to cool.

4. *Purgatives* of a sodic base (such as sulphate of soda, etc.,), to be taken every third day.

5. *Inhalations of oxygen*, or air baths, if circumstances permit.

Although insomnia is often a troublesome symptom in this affection, it is best not to give any hypnotics, especially not morphine. Sleeping can frequently be induced by calming the troublesome itching with the following lotion:

℞.—Sublimate, ... } āā 5 grains.
Chlorhydrate of ammonium, }
Camphorated alcohol, ... ℥j.
Cherry-laurel water, ... ℥ixss.—M.

—*Rev. de Thérap., Med. News.*

Chloroform in Dyspepsia.—Chloroform administered in the various forms of dyspepsia overcomes fermentation and flatulence; it is best given in one of the following formulas:

1. Method of Dr. Wilson.—From ten to twenty drops of chloroform, to be taken in a few spoonfuls of sweetened water, in flatulent dyspepsia. After a few minutes eructations occur, followed by improvement.

2. Method of Dr. Huchard.—Administer before each meal one dessert-spoonful of the following:

℞. Chloroform water, 150 parts; mint water, 30 parts; water, 120 parts.—M.

Or, from eight to ten drops of the following mixture in a wineglass of water: ℞. Tincture of nuc. vomica, tincture of gentian, tincture of anise, āā ʒ j.; chloroform, gtt. xx-xl.—M An appropriate diet and oxygenated waters at meal times form part of this treatment.

3. Methods of Drs. Regnault and Leseque.—This treatment applies particularly to painful dyspepsias with dilatation of the stomach: ℞. Chloroform water, 150 parts; orange flower water, 50 parts, water, 100 parts.—M. One dessertspoonful to be taken every fifteen minutes, until the pain ceases.

Or the following for the same affections: ℞ Chloroform water 150 parts; tinct. anise, 5 parts; water, 145 parts.—M.—*Revue Gén. de Clin. et de Thérap.*

IGNIPUNCTURE OF THE TONSILS.—Dr. Wilhelm Roth, of Fluntern, finds that in order to reduce the size of the tonsils without risk of troublesome hæmorrhage, which is not uncommon, especially in young subjects, the best plan is to employ ignipuncture, as has been recommended by Krishaber, and more recently by Verneuil. The tonsils and neighboring parts are first brushed over with a ten to twenty per cent. solution of cocaine. The finest point of the thermo-cautery, heated to redness, is then inserted to a depth of about five millimetres in three or four spots a few millimetres apart from one another on the tonsils. The instrument is not allowed to remain more than one or two seconds in the tissue. The whole operation, including both tonsils, can be performed in a very few minutes without any bleeding and with scarcely any pain. It must be repeated four or five times at intervals of two or three days, and this is usually sufficient to cause the tonsils to return to their ordinary condition.—*Lancet.*

DANGERS OF CHOLOROFORM IN LAPAROTOMY.—Professor Zweifel, of Berlin, has remarked several times that pneumonia has occurred after laparotomy has been performed under choloroform, either at night or on dark days when gas has had to be used. In some cases which were done in a small, badly ventilated room, where a good many bystanders were present and two or three Argand gas burners were in use, a peculiar cloud of partly decomposed choloroform vapour was very noticeable, not only to the eye, but by the effects produced on the respiratory organs of the operator and his assistants. When ether was used instead of choloroform these effects were not observed. Intending the establishment of the electric light, Professor Zweifel commences with a mixture of alcohol, choloroform, and ether alone, the patient being put under the influence of this in another room, ether being subsequently used during the operation.

BELLEVUE REMEDY.—The following is the prescription for an expectorant mixture much used in Bellevue Hospital:

℞.—Ammonii carbonatis, - - gr. xxxij.
Extr. senegæ fluidi,
Ext. scillæ fluidi, - - - āā f ʒ j.
Tr. opii camph, - - - - - - f ʒ vj.
Aquæ, - - - - - - - - - f ʒ iv.
Syr. tolutan, - - - q. s ad f ʒ iv.—
Dissolve and mix. Dose, a teaspoonful.

As a gargle for inflammatory troubles, Dr. Abraham Jacobi's "Special" is used:

℞.—Potassi chloratis, - - - gr. lxxx.
Tr. ferri chloridi, - - - ♏ clx.
Glycerini, - - - - - - f ℥ ij.
Aquæ, - - - - - q. s. ad f ʒ viij.

Dissolve and mix. Used as a gargle and internally in doses of half ounce.—*Med. & Surg. Rep.*

TREATMENT OF ANAL FISTULA WITHOUT OPERATION.—Fistulæ which do not cause pain should not be operated upon. The clothing should be soft and smooth, and extreme cleanliness should be observed, the general condition of the patient should be attended to, and of systemic remedies a mixture of the bromides and iron is especially valuable. The following is an excellent remedy: Bromide of potash, 10 grams; citrate of iron, ammoniated, ½ gram; syrup of bitter orange peel, 190 grams. Tablespoonful should be taken morning and evening.

Topical appliances should be made after each stool Here is a good formula for suppositories: Iodoform $\frac{1}{10}$ gram; extract of belladonna $\frac{1}{60}$ gram; cocoa butter, q.s. This should be applied after each defecation and on going to bed.—*Professor Guyot, Jour. de Méd.*

AN UNUSUAL ACCIDENT ATTENDING TOOTH EXTRACTION.—To the record of the numerous casualties which may follow tooth extraction Mr. Ackery, at the Odontological Society of Great Britain, has added another probably unique case. A molar was extracted from a patient while under the influence of nitrous oxide gas; the apex of one root, however, was left behind. A sinus subsequently appeared, and this did not heal upon the removal of the remaining portion of the tooth. Eight years after the original operation a substance was discharged from the sinus, which proved upon examination to be the point of one of the jaws of a tooth forceps, which had doubtless been broken and left in the alveolar process at the time of the endeavor to extract the tooth.—*The Lancet*, February 9, 1889.

THE CHOICE OF A HYPNOTIC IN INSOMNIA.—Chloral has fallen into disfavor of late years, and deservedly. It weakens the heart's action, lowers the powers of self control, and creates a craving for its continued use. The depression and general disturbance of function produced by opium contraindicate its use in a large majority of cases. The bromides are useful as a sedative, but loss of bodily weight and blood impoverishment follow their frequent exhibition. Sulfonal has been hailed as the hypnotic *par excellence*, and certainly it has given satisfaction in most cases; but there are instances where it is slow in its action or contrary in its effects. These objections can be urged, however, against every known remedy, and should not detract from the value of this new sleep-producer. Dr. Clouston (*Am. Jour. of the Med. Sciences*, April, 1889), throws the weight of his authority in favor of the claims of paraldehyde as the best hypnotic. It is so valuable, he says, so reliable, so free from risks, that it cannot be too widely known by the profession. It acts so quickly that the patient is often asleep in five minutes after getting the dose. After a paraldehyde sleep there is no headache, no lassitude, no loss of appetite, no disagreeable feelings. It restores the sleep habit of the brain in many cases. As to the dose of paraldehyde, begin with forty minims or a drachm, and go up to two, three, or even four drachms, if necessary. Give it mixed with tincture of quillaya in cinnamon water. Its bad taste cannot be got over.

CONSANGUINEOUS MARRIAGES.—The author of a recent work on this subject calls attention to the curious ideas which have been generally received in reference to the infecundity of, and physical degredation consequent on, consanguineous marriages. So far as the data given may be trusted—and it is hardly to be supposed that the author holds a brief on the opposite side—there is absolutely nothing to show that marriages between near kinsmen are lacking in fertility, or that they are peculiarly liable to give issue to deformed or diseased offspring, There is no lack of instances of enforced consanguinity, in the matter of marriage, in isolated communities, according to M. Huth, to disprove the assumption that physical degeneration is likely to result from the practice. An investigation into a number of unions between uncles and nieces, nephews and aunts, and cousins in the first and second degree, give an average of children rather above than below the general average, though this is attributed to some extent to the comparatively early age at which such unions are generally contracted. Breeders inform us that the results are markedly in favor of consanguineous unions between healthy well-bred animals. Unions between men, or animals, of widely different varieties, on the other hand, have a decidedly injurious effect on the offspring, and beyond a certain limit are almost absolately sterile. Mulattoes and the half-breeds of India and America are striking examples of the deterioration to which such racial disparity gives rise. The great point to bear in mind is that the union of individuals with the same morbid tendencies intensifies the taint, and that, too, quite irrespective of any consanguinity. The moral, according to the author, is that the reasons which have led to the prohibition of marriages within certain degrees of relationship are social, and not physiological.—*Med. Press and Circular.*

DYSMENORRHŒA—William Wiles. M.D., Snaresbrook, Essex, says: I used Aletris Cordial especially ia a case of severe dysmenorrhœa of considerable standing. The first period that occurred after taking the Cordial was passed through with considerably less pain than usual. The patient took the medicine for a week before the menstrual period was expected for six months. At the end of that time no difficulty or pain was experienced. So that, considering the time the patient had been suffering before, the benefit was very marked.

TREATMENT FOR CATARRHAL AFFECTIONS OF THE THROAT.—Dr. G. B. Hope, 34 W. 51st Street, New York, Attending Surgeon Metropolitan Throat Hospital, and Professor Diseases of the Throat, University of Vermont, says: "For a long time I have been employing Horsford's Acid Phosphate as a constitutional treatment for catarrhal affections of the throat. I consider it to be among the very best tonic excitants of the vocal organs, and particularly applicable in relieving the fatigue and huskiness of voice incident to those who pursue a professional career of actor or vocalist, and far preferable to the various forms of wines now so generally recommended for this purpose. I have seen no other allusion to its employment in this direction, which I believe you are perfectly safe in recommending both from a theoretical and practical point of view."

POWDER FOR OZŒNA.—Cozzolino (*Jour. de Méd.*) gives the following:

R.—Salol	. . .	5 grams.
Boracic acid	. .	2 "
Salicylic acid	. .	0.50 centigrs.
Thymol	. .	0.20
Powdered talc	. .	10 grams.—M.

S.—Snuff frequently.

CALOMEL with digitalis succeeds well *(Schwass)* in removing ascites following hepatic cirrhosis, especially when the patient comes under treatment early in the disease.

THE CANADA LANCET.

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AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & CO., 30 Cornhill, London, Eng.; M. H. MAHLER, 28 Rue Richer, Paris.

TORONTO, AUGUST, 1889.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

THE CARE OF THE INSANE.

The ponderous mechanism of the existing laws for the admission of an insane person into one of our asylums, has been dwelt upon at considerable length at various times, in both the professional and lay journals of Canada. That the present methods are not as facile as they should be, or as indeed they might be, is evident to anyone who has had the painful experience of committing a patient suffering from mental alienation. But great bodies move slowly, and the amount of conservatism displayed by our legislators in this matter compares favorably with that of the old-line Tories, who would gravely discuss for hours the advisability or not of changing the number or style of buttons on the soldier's coat, or the regulation length of his hair. And this weary delay of the law exists, notwithstanding the fact that the medical profession is, and has always been well represented in our legislative halls. It would have been reasonable to suppose that some one of these legislators, who belong to our profession, would long ago have succeeded in sweeping away some at least of the old-time barriers, and making the sad road to the asylum as short and as little unpleasant as possible.

It would seem that the present methods are intended to protect the individual. But it should be remembered that the community also has rights to be considered. Insanity means danger to the community, and while the individual should be protected to the fullest extent, the community should also be so guarded, that the terrible consequences of alienation in the individual may not endanger life or property.

The difficulty seems to lie in the magisterial supervision of those held to be insane. The question of sanity or insanity is surely a medical one, no layman, be he judge or magistrate, being considered competent to pass an opinion as to the fact. So that the medical testimony is, after all, the only one which has weight. Why then should there be so cumbrous a method of committal? Have we not all seen the evil results of the delay in treatment in certain cases demanding prompt attention by experts? The month, or perhaps more, during which the unhappy lunatic lies in jail, may be so many days spent with the worst possible surroundings, during which the chances for his eventual recovery become greatly lessened.

There can be no doubt that the "painful and harassing procedures," now necessary for the admission of a patient to the asylum, are the cause of the retention at home of many lunatics who, both for their own, as well as their relations' sake, would be much better under the special environment and treatment of an asylum. But parents and friends hesitate to open up the case of a son or daughter who begins to show symptoms of mental derangement, or of a wife suffering from, say, puerperal mania, to the magisterial function of their neighborhood, and thus many valuable days are lost for early treatment, days which can perhaps never be recalled, and which may, by their inactivity, doom the unhappy sufferer to a life of alienation, which might, with early special treatment, have been averted. There certainly exists a strong prejudice in the minds of a majority of the community against sending a relative or friend to an asylum. This prejudice is no doubt the result of the education of generations regarding the insane, heredity, etc. It should be the duty of the profession to do battle with such prejudice, and educate the laity up to the idea that insanity is a disease requiring prompt and special treatment by experts, with proper environment, and that the so-called kindness of keeping a dement at home is, in nearly every case, an absolute injustice, not to say cruelty to the sufferer, as well as fraught with danger to all those with whom he comes into contact.

DIPHTHERITIC PARALYSIS.

The cause of this frequent sequela of diphtheria is not well understood. It is most probably a *neuritis migrans*, as Fagge called it. This theory would go to show that a morbid process, starting in the part most affected by the diphtheritic poison, travels along the fibres until the centres are reached. Trousseau pointed out that when the disease was cutaneous, the limbs were affected as early as the fauces. As against the theory that it is due to a general systemic poison, we have the fact that faucial paralysis is the rule, and true paralysis has been known to follow an abscess of the tonsil, as also a case of parotitis. Some authors assert that the paralysis occurs after the primary disease has ceased; but this is certainly not true, although in many cases it does not show itself till the patient is thought to be well. It not unfrequently begins, says Sanné, on the fifth or sixth, or even as early as the second day from the beginning of the diphtheria,

It has been all along looked upon as having a favorable prognosis. But recent observation would go to prove that it is a very serious matter. The staff of the Great Ormond St. Hospital have concluded that, in children especially, it is attended by dread possibilities. The organs supplied mainly by the pneumogastric and phrenic nerves, viz., heart, lungs and larynx, are the ones through which danger comes to the sufferer. Cases of heart failure or paralysis; of pneumonia whether from disturbed innervation or from the irritation of the lungs by inhaled matters, the larynx having lost the power of properly protecting these organs, are frequent, and extremely dangerous. The muscles of respiration are sometimes attacked, giving a panting, difficult breathing as the result. Death may come on by more or less slow degrees in this way, accumulation of mucus from want of functional activity of the lungs, cyanosis and asphyxia. When the heart is the seat of the trouble, there is, says Duchenne, a sense of cardiac oppression and distress; small, slow, irregular pulse, becoming at times thready and imperceptible. The cardiac lesion is perhaps the most serious of the whole series, for though it may be cured, death is the usual result. Sometimes this organ is alone paralyzed.

The treatment which has so long been followed in this form of paralysis has not been materially changed. A few years ago, the necessity of injecting the strychnia into the tissues was urged, but it is doubtful if the benefit derived from this drug is much if at all increased by this method of administration. Perhaps the syr. ferri, quin. et strychniæ phosphat. is as useful a preparation as any, combining as it does the specific action of the strychniæ with the useful tonic action of the other ingredients of the syrup.

Oertel objects to the use of either strychnia or nux vomica, depending upon ferruginous and other tonics; but the consensus of opinion is strongly against him. Massage of the limbs, stimulating baths as of warm salt water, and electricity are all useful in their place. The patient may have to be fed for weeks through the stomach-tube or per rectum, the most perfect nutrition possible being a *sine qua non* in the management of such cases.

THE VIRTUE OF THE PROFESSION.

The men of the medical profession are rarely credited with the virtue that their conduct entitles them to; there is no profession or occupation beset with so many temptations and opportunities as ours. The doctor is made the repository of the family secrets and the misdoings of the patients. With closed doors and drawn window blinds in the doctor's private office, the lady patient describes her symptoms and relates in detail any circumstances that may stand in a causative relation to a disease peculiar to her sex. During a long course of treatment there springs up, by gradual growth, a simple familiarity which may ripen into an admiration on the part of the patient, encouraged by the kind and gentle treatment and sympathetic manner of the benevolent physician. With this state of facts, which are not in the least overdrawn, it is highly creditable to the profession that so few violate their trust and take advantage of the weakness of the gentler sex under these circumstances. We do not pretend to say that the physician is purer by nature than men of other professions, but through their special education, and the sense of honor inherent in every right-minded man, they learn to exercise self-denial with those whose physical welfare is committed to their charge. Opportunities for blackmail are fruitful under the above conditions, yet few are improved.

The clergy, we are sorry to say, suffer tenfold more scandals than physicians, notwithstanding that they are the physicians to the moral and spiritual being. They assume to build up what, sad to relate, some of them destroy by a single misdeed. When we pause and look into the retrospect, and compare the moral conduct of the medical man towards his clients with other professions and occupations in life, we are proud to announce our profession as a *physician*.

CANADIAN MEDICAL ASSOCIATION.—The following are the papers promised for the meeting of C. M. A., at Banff, August 12th, so far as heard from :—

The Endemic Fern of the North-West Territories (Mountain Fern), Dr. A. Jukes, Regina, N. W. T. The climate of South Alberta, with special reference to its advantages for patients with pulmonary complaints, Dr. G. A. Kennedy, McLeod. Traumatic Inflammations of the eye and their proper treatment, Dr. John F. Fulton, St. Paul, Minn. Hæmatoma of the Vagina and Vulva, Dr. A. W. Wright, Toronto. A case of Empyema successfully treated by free incisions, Dr. James Ross, Toronto. The early recognition and treatment of Epithelioma, Dr. L. Duncan Bulkley, New York city. The relief of pain in Eye and Ear affections, Dr. R. A. Reeve, Toronto. Sulfonal, Dr. James Stewart, Montreal. Nephrolithotomy, Dr. F. J. Shepherd, Montreal. Vertigo, an eye and ear symptom, Dr. J. W. Stirling, Montreal. A Resumé of a few surgical cases, Dr. E. A. Praegu, Nanaimo, B. C.

SULPHONAL AS A HYPNOTIC.—The Swiss correspondent of the *Br. Med. Jour.* says that Drs. Paschoud and Claret read a paper on the use of sulphonal in insanity, in which they stated that the drug is of great service, especially in maniacal excitement, and in the insomnia of melancholia, well as in every kind of sleeplessness of nervous rin. When given in a dose of 2 grammes ich, if necessary, may be safely repeated once wice in 24 hours), sulphonal produces calm refreshing sleep, lasting from 4 to 5 hours. remedy caused no digestive, respiratory, or ılar disturbances, nor any unpleasant sub- ive sensations on awakening.

QUININE IN PREGNANCY.—The idea that full doses of quinine are liable to produce abortion seems to be no longer held. A writer to the *Br. Med. Jour.* says, "I have frequently, both at home and abroad, administered large doses of quinine (10 to 20 grains) to pregnant women suffering from malarial fevers, and never observed the uterus at all stimulated by it. I do not know of any drug that will cause, when taken internally, the expulsion of the contents of the pregnant uterus."

FOR TAPE-WORMS IN CHILDREN.—The *Lyon Méd.* gives the following formulæ as effectual and agreeable :

I.

℞.—Oleoresin of aspidium	ʒj to ʒijss.
Peppermint water	f. ʒss.
Essence of anise	gtt. x.
Chamomile water	f. ʒj.
Syrup of sugar	f. ʒv.
Syrup of bitter orange-rind. . .	f. ʒv.

II.

℞.—Oleoresin of aspidium	ʒj.
Calomel	6 grains.
Sugar	ʒij.
Gelatine	q. s.

Make into the consistency of jelly, and administer as a confection.

CALOMEL AND DIGITALIS IN ASCITES (in dropsy from hepatic cirrhosis).—Schwass (*Centralbl. f. klin. Med.*) advises the use of calomel and digitalis as follows :

℞.—Calomel	2 grains.
Digitalis	¾ grain.—M.

S.—Every three hours for a week.

The diuretic action of this combination is far greater than that of either drug alone and can also be tolerated longer and better than either drug when taken by itself.

PROLONGED GESTATION.—Dr. Mans (*N. Y. Med. Jour.*) gives a case of prolonged gestation which he thinks can be authenticated. The period of pregnancy, calculating from the time of last menstruation, was 334 days. At the end of this time the patient bore a healthy male infant weighing nine pounds. This almost breaks the record, though Simpson mentions a case in which delivery occur-

red 336 days after menstruation ceased. Playfair places the extreme limit at 295 days.

PRINTER'S ERROR.—In the Announcement of Trinity Medical College, just issued, the reference to Dr. Spilsbury's course of practical instruction in diseases of the throat and nose (at page 19) is marred by the accidental introduction, by the printer, of the Dr.'s name before the word "*instruction.*" Any one can readily see that it is a printer's blunder. That the teaching will be good and practical, the students will soon discover, Dr. Spilsbury's protracted training in Europe for his work having specially fitted him for this post.

WOMAN'S MEDICAL COLLEGE, TORONTO.—The following gentlemen have been appointed to positions upon the staff of this institution: Dr. Atherton, Lecturer on Principles of Surgery; Dr. Powell, Associate-Lecturer on Practice of Surgery; Dr. B. G. McKenzie, Lecturer on Orthopœdics and Surgical Anatomy; Dr. R. S. Tyrrell, Lecturer on Jurisprudence; Dr. L. M. Sweetnam, Lecturer on Therapeutics.

FOR TONSILLITIS.—Dr. John Aulde recommends (*Med. Reg.*) the following as a useful medicine and gargle in this troublesome complaint:

℞.—Tr. guaic. ammoniat.	. .	
Tr. cinchonæ comp.	. .	āā fʒiv.
Potas. chloral.	. . .	ʒij.
Mel. desp.	. . . .	fʒiv.
Pulv. acaciæ	. . .	q. s.
Aquam.	. . .	q. s. ad fʒiv.

M. Sig.—Use as a gargle, and take a teaspoonful every two hours.

ATROPINE IN HÆMORRHAGE FROM THE LUNGS.—Dr. Stirling says the *Therap. Gaz.* relates a case in which hæmorrhage from the apex of the left lung was entirely uncontrollable by ergotin, and all the other remedies usually prescribed. He administered $\frac{1}{150}$ grain of atropine, hypodermically, with the result that the bleeding was at once stopped. He found that when the drug was stopped the bleeding recommenced, to be controlled by a further use of the atropine.

The name of Dr. Buller, of Montreal, was inadvertently omitted in our last number from the list of those attending the Ontario Medical Association. The doctor read a paper which will appear in a subsequent issue of this Journal.

HONORS TO RICHARD QUAIN.—The Queen has been pleased to appoint Richard Quain, M.D., LL.D., F.R.S., Fellow of the Royal College of Physicians, to be one of Her Majesty's Physicians Extraordinary.

Books and Pamphlets.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS—Consisting of original treatises and complete reproductions in English, of Books and Monograph selected from the latest literature of foreign countries, with illustrations, etc. Published monthly at $10 per year. Single copies $1.00. New York: William Wood & Co., 56 & 58 Lafayette Place. Toronto: Vannevar & Co.

In our March issue we noted the January and February volumes of these *Monographs.* We have lately received the March, April, May, June and July numbers. We can only reiterate what we then said as to the character of these productions; their excellence is made the more manifest, as they continue to appear, while their cheapness and attractiveness are undoubted. The contents of the various numbers are as follows: March—Neurasthenia and its Treatment; Antipyresis and Antipyretic Methods of Treatment, by Dr. H. Von Ziemssen; the Tongue, as an Indication of Disease, by Dr. W. H. Dickinson; On the Treatment of Cystic Goitre, by T. M. Hovell, F.R.C.S.; New Remedies from 1878 to 1888, by Dr. C. Cauquil. April—On Diabetes and its connection with Heart Disease, by Jacques Mayer, M.D.; Blenorrhœa of the Sexual Organs and its complications, by Dr. Ernest Finger. May—On the Preventive Treatment of Calculous Disease and the use of Solvent Remedies, by Sir Henry Thompson, F.R.C.S., M.B., London; Sprains; their consequences and treatment, by C. W. Mansell Moullin, M.A., M.D. Oxon. June—General Orthopedics, including Surgical Operations, by Dr. August Schreiber, Surgeon-in-Chief to the division of the Augsberg Hospital. 388 illustrations. July—Cancer and Cancerous Diseases, by Sir Spencer Wells, Bart., F.R.C.S.; Cardiac Dyspnœa and Cardiac Asthma, by Dr. S. Von Basch; The Influence of Menstruation and of the Pathological Condition of the Uterus on Cutaneous Diseases, by Dr. L. Grellety; Tension as met with in Surgical Practice, Inflammation of Bone, Cranial and Intracranial Injuries, by T. Bryant, F.R.C.S.; Antisepsis and its Relation to Bacteriology, by Dr. J. Neudorfer.